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THE SPHERE, APRIL 18, 1942
With which is incorporated "BLACK & WHITE" 1/6

# THE SPHERE

Vol. CLXIX No. 2204 WITH WHICH IS INCORPORATED THE GRAPHIC APRIL 18 1942

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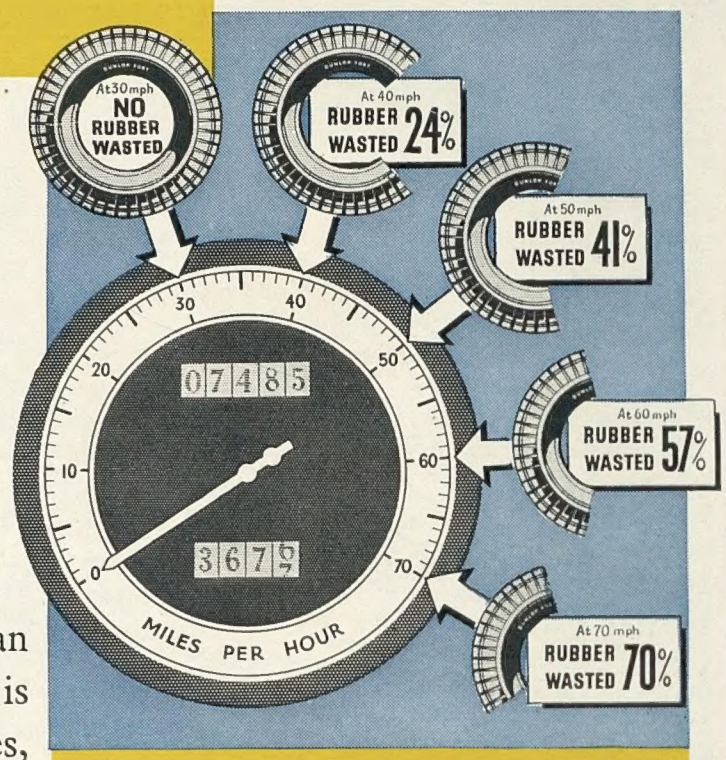
# Tyre Economy

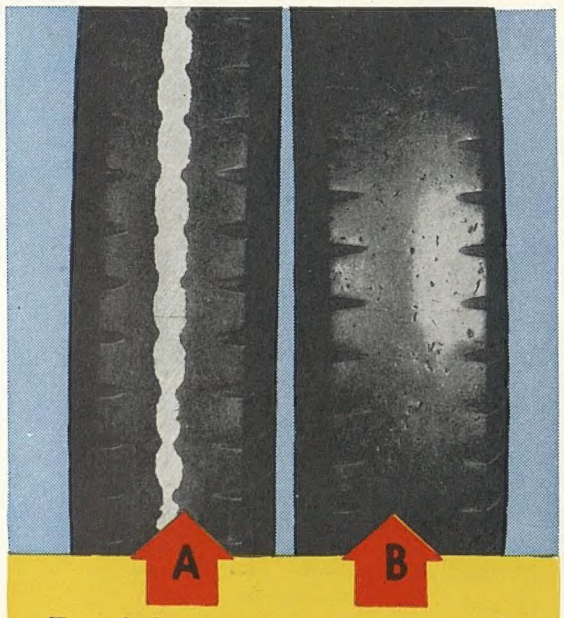
There is a real threat to the world's supply of rubber and it is essential that tyres now in use should yield the maximum service possible

# » DRIVE SLOWLY «



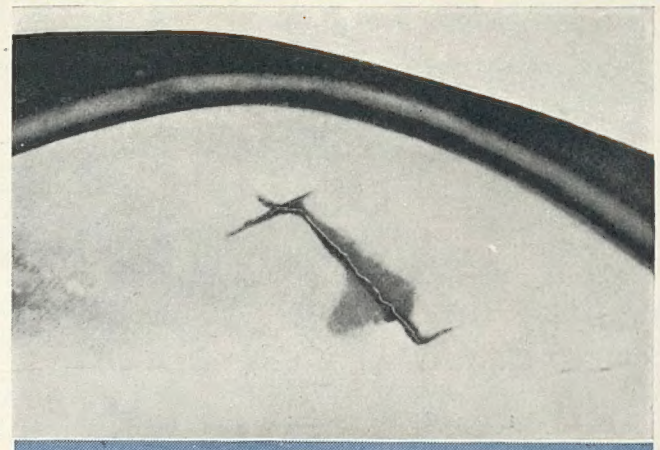

**THE EFFECT OF SPEED ON THE LIFE OF CAR TYRES CORRECTLY INFLATED**

A car running at 50 m.p.h. uses 41% more rubber than it does at 30 m.p.h. and at the higher speeds there is much greater risk of tyre damage from small obstacles, harsh braking and fast cornering. In addition to wear, high speeds increase tyre temperatures and render the casing more liable to damage. In a pre-war test, two identical cars were driven over the same road—one fiercely and the other carefully. The tyres of the second gave seven times the mileage of those fitted to the first.




*Tyre A, driven at an average of 70 m.p.h., and worn down to the cord has given under one third of the mileage of Cover B, which has been used at ordinary touring speeds.*

On the road, high *maximum* speeds make only a few m.p.h. difference in *average* speed — representing a saving of perhaps 10 seconds every mile. Tyres are scarce and may be scarcer. Speed these days isn't worth its cost in rubber — So, think of your tyres and DRIVE SLOWLY



*A carcase fracture caused by hitting a small obstacle at speed. This type of damage frequently shows no outward signs of its existence except a small bruise before complete failure occurs.*

# DUNLOP TYRES

## *Last Longer*

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1. DRIVE SLOWLY. 2. INFLATE TO RECOMMENDED PRESSURES. 3. DON'T OVERLOAD 4. CHECK WHEEL ALIGNMENT FROM TIME TO TIME. 5. REMOVE EMBEDDED STONES. 6. AVOID OBSTACLES.

Volume CLXIX No. 2204

The SPHERE, London, April 18, 1942

THE SPHERE

With which is incorporated "THE GRAPHIC"

The Empire's Illustrated Weekly

London, April 18, 1942

**THE KING VISITS THE TROOPS IN THE SOUTHERN COMMAND: TALKING TO THE LEADER OF A NIGHT-ASSAULT PARTY, whose face has been blackened to facilitate operations in the dark**

During his recent visit, the King spent a whole day with the Southern Command. At one point he walked over a mile along a roadway lined with soldiers: during his inspection His Majesty saw anti-tank guns, and watched men with blackened faces demonstrate a night attack. The new methods of modern warfare, learned as the result of recent operations in many parts of the world, are now being inculcated to British troops. The small-scale attack on Bruneval recently and the highly successful raid on St. Nazaire were examples of the new methods. When time for big-scale offensive action comes, the Army will not prove wanting in an up-to-the-minute knowledge of the deadliest tactics

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# A WAR NEWSLETTER—No. 137

1, NEW OXFORD STREET, W.C.1

## The Vatican and Japan.—

The keys of St. Peter fit the locks of Heaven's and Hell's gates. Whether we be heretics or of the faithful, we shall be well advised to defer judgment until we have heard the summing-up, and have before us all evidence necessary for forming a verdict. That some explanation is called for from the Vatican, no one can dispute. Until it comes, it is inevitable that among the faithful, as among the heretics, there must be searchings and suspicion, doubt and sorrow. If ever there was a time when leaders of courage should bravely declare for Paul and not for Apollos, it is to-day. If ever it was apt to use the key of Heaven's gate, rather than the key of Hell's gate, it is to-day. For Hell has broken out by side-doors and alley-ways and covers the earth's face, while the powers of Heaven are pent up. Perhaps the representative of St. Peter, whose responsibility to Christendom was never before so great and so urgent, has a perfectly sound, acceptable and logical explanation to offer, and one free from casuistry and politics. If there be none such, there will at least be some excuse for being a heretic.

**Canada.** — What is the most heartening and inspiring *fact* at this crucial and grim stage of the war? I shall plump for Canada—her war effort, her example, the evidence which we can all gather for ourselves of the spirit and noble character of her men and women, the immensity of her output, the inspiration of her loyalty, her uncalculating generosity, her fearless, uncriticising faith in the greatness of the cause, and in the efforts of her Allies. Among the Allies, the handicaps to the war effort vary in nature and degree. Some are poor propagandists; some carry a dead weight of politicians still party-minded; some are harder-pressed by the enemy than others. And these handicaps breed suspicion, doubt and criticism. Canada's example is perfect, and, for the moment, she among the nations of the Commonwealth stands forth as our Roland to Russia's Oliver.

"Give all thou hast. High Heaven rejects the law
Of nicely calculated less or more."

That, it seems, is Canada's war-slogan. That is the lead and inspiration which she is giving to the cause of freedom. Britain, America, Canada; what a bloc of English-speaking nations, dedicated to a new order of peace and justice and freedom for all, is to-day rising in the West. Her foundation is upon the Holy Hills, and Canada is the corner-stone.

## Tyres — and America.—

If petrol and tyre rationing creates a problem and a sacrifice in Britain, an American correspondent reminds me of its *a fortiori* effect on America. In that country the whole social structure is pegged to the motor-car. Take Pennsylvanian instances. My friend writes: "There are more than 40,000 men working at the Navy Yards, the majority of whom live ten miles from their work. We do not have buses in the country as everybody uses cars, and there are few street-cars in towns. . . . To come down to our own case, our laundress lives among her friends eight miles away. Many people have laundresses who come in their own cars to wash clothes and get home in time to cook their husband's dinners. My gardener, an Italian, lives four miles away and comes each day in his own car. . . ." These instances, trivial and important, remind us how trifling is our problem compared with America's, where every workman has hitherto depended on reaching his work in his own car or in one jointly owned. It is a big problem of transport reorganisation which America must be facing. And without grousing. There is no note of grousing in my friend's letter. He writes of an America full of heart and willingness and "pep," proud of MacArthur, proud to pay four times the weight of direct taxation paid last year, proud of every evidence of increased war output, and ever pressing for more and quicker production.

**BRITAIN'S NEW G.O.C. IS AN INVASION EXPERT:** The War Office has announced the appointment of a new G.O.C., Eastern Command. He is Lieut.-General K. A. N. Anderson, a Scot, who has succeeded Lieut.-General Laurence Carr. General Anderson has done much to co-ordinate the work of the Home Guard with the Field Army, and the anti-Invasion preparations he has made in his own Corps are described as of the most complete character. He is fifty years of age; General Carr (who is to receive another appointment) is fifty-five. At the beginning of the war, General Anderson was at the head of a regular Infantry Brigade, but was later promoted and took part in the retreat from Dunkirk

## Bevin on the Job.—

I have been reading Mr. Bevin's collected speeches published by Heinemann under the title, *The Job to be Done*. The book has had a big sale in America. The speeches it contains cover many years leading up to the war, and carry the reader to the autumn of 1941. They are manly, blunt, broadminded, courageous, and, as far as may be, untinged with party considerations. It is not an easy job—for the nation or for the Minister. For everyone concerned in it conflicting loyalties bristle. That is inevitable in a "transition-stage" democracy such as ours in which in times of peace the conflict between labour and capital is for ever joined with vigour, if not with bitterness and ferocity. It is not surprising if, here and there, one comes across instances, in what is, in general, a fair-minded, uncontroversial background, of stings and flings directed at capitalism and of a suspicion that once-entrenched and vested interests may seek at the first opportunity to bring back the "bad, old days," which Mr. Bevin (and a majority of the nation) regards as better dead. And reading his speeches the doubt rises in my own mind as to that post-war outlook on which the peace and resettlement of Britain and the world *wholly* depends; and the doubt extends to cover labour as well as "capitalism." In 1918 the nation was pretty well aware of the virtues of a new-found brotherhood among a people and among nations, and of the vital need for prolonging the spirit of sacrifice and fellowship for years beyond the war. Yet within a few weeks Britain was in the throes of a "coupon" election—a hideous manifestation of mass myopia, greed and vengeance—and half the nation was all-out to forget national virtues and to snatch, every man for himself, every crumb of profit and pleasure he could "to make-up for all that he had endured." Hence these tears! Hence the present job-to-be-done. What hope that there will be no such repetition? No instant return to party strategy, to national selfishness, to individual greed and mutual class suspicion, to throwing the tenets of Christianity, toleration and patience once more to the winds and scrambling for party, class, individual, gains? What *scares* me are the daily instances of the public's shortness of memory, of our fatal facility for reversing our *convictions* almost overnight, of that *nostalgie de la boue* of the bad, old days which breaks out the instant that war pressure or anxiety is temporarily removed. We British are grand under bombing; we are not so grand under a serene sky. If Mr. Bevin will stick to his impartiality and justice to all classes and interests when the armistice comes, I will promise him to do my best to stifle my *nostalgie* for the bad, old days. It will depend a lot on Mr. Bevin—in war and after war.

## Criticism and Patriotism.

—Bonaparte highly valued his "old grumblers." When they ceased to grumble, he read the danger signal and knew that all was not well with the Grand Army. It is my belief (not a mere comfortable belief) that most of our national criticism is due to intensity of patriotism and keenness for our own acre in the field of war endeavour. Thus we of the Old (Home) Guard grouse and grumble about weapons and training and functions, because we want to shine *on the day*. Thus your old salt-horse sailor, your air expert, your salvage sleuth, your economist, grumble and criticise every instance of failure, duplication, waste and misdirected effort. Up to a point, this vigour is not only understandable but wholesome. It may have a long rope, but not an *unlimited* rope. I ventured to quote to one patriot a few lines from Emily Eden's enchanting novel of 1850—*The Semi-attached Couple*—which a decade or so ago I rescued from oblivion for Elkin Mathews and Marrot:—

"I cannot think it so, Anne; it is too bad to be true."

"Nothing is too bad to be true, Mr. Douglas; and nothing is true that is not bad."

Come; we are human and frail, I know, but there must be some good in this Empire somewhere. Somewhere, someone is doing a decent job of work. Let us try to find him out and tell the world about him, for a change. At this stage, your fond old rosy-spectacled optimist may prove as healthy as your old grumbler.

## A Spade Call.—

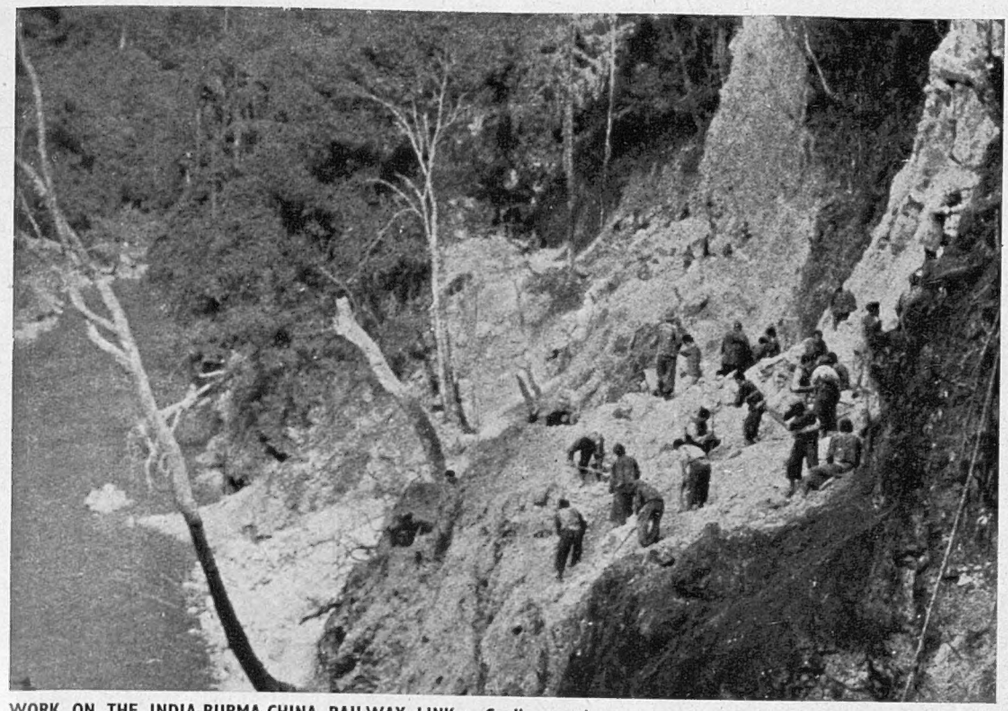
Spades are trumps! Laying one's hand down on the table, it is permissible and pleasant to examine its strength. A month ago there were two acres of vegetable garden to be trenched, manured and prepared with or for the season's sowings and plantings. No labour, even inexpert, was now available to do the job which last year had afforded vegetables and fruit of all the usual kinds for sixteen persons. Despite frosts, lumbago, countless wartime and domestic chores, my wife and I took up our spades and bent our backs. With constant interruptions, we worked in narrow strips and short shifts. Rome was not built in a day. The day's achievement looked petty and trivial, like a postage stamp afloat on the ocean. But the days drew into weeks, weeks into a month—and lo! the miracle is accomplished. The ground is all dug and dunged. The seeds are in. The early potatoes, shallots and onions are in position. What remains of the winter crops are tidied up and given a new lease of life. The amateur is become the professional *malgré lui*. And, Lord! how the interest grows when you garden not to kill time, but to preserve bare life! Already there are little lines of greenery visible, and straight lines too!

## The Opening of Gardens.

—But it is not all onions and potatoes in the gardens. The colour is coming back to them and the music. The gardens of England, recking little of war, are holding up their heads proudly. Already they are ablaze with crocuses, daffodils, primulas, almond blossom, pirus japonica and camellia. And the cherries and azaleas and fruit blossom give promise of good things to come. Those who organise the opening of private gardens in aid of district nursing have taken their courage and faith in their hands and have decided to repeat last year's "doubtful experiment." The doubts were traitors last year, for a fine harvest was reaped in shillings and sixpences. The doubts remain this year. There looms the shadow of Hitler's gliders and the ugly fact of no more basic petrol ration. But they bank on local support. Almost every garden has its neighbours within walking distance or bus radius, and almost every neighbour is a garden-lover. And I am not now so sure that my neighbour's interest in my garden is centred on my cherry blossom or herbaceous border. I dare say he may be even more interested in comparing (to his advantage) my shallots with his, and my lines of young vegetables with his own straighter lines! Anyway, there is rest and sanity in gardens of flowers or vegetables and a fine opportunity for neighbourliness in visiting them. May the noble cause benefit as it deserves and as it benefited in 1941! Already the first gardens have opened their gates.

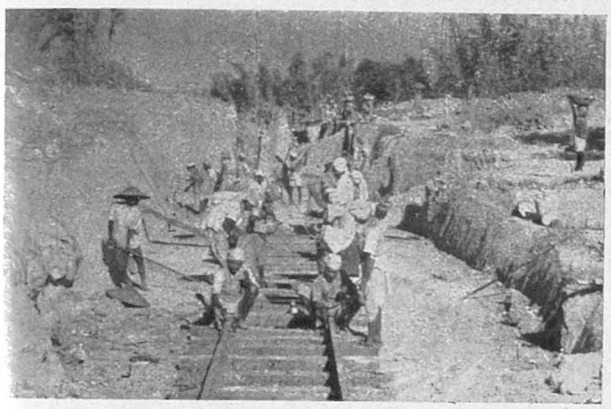
THE OLD STAGER

# PICTURES FROM BURMA



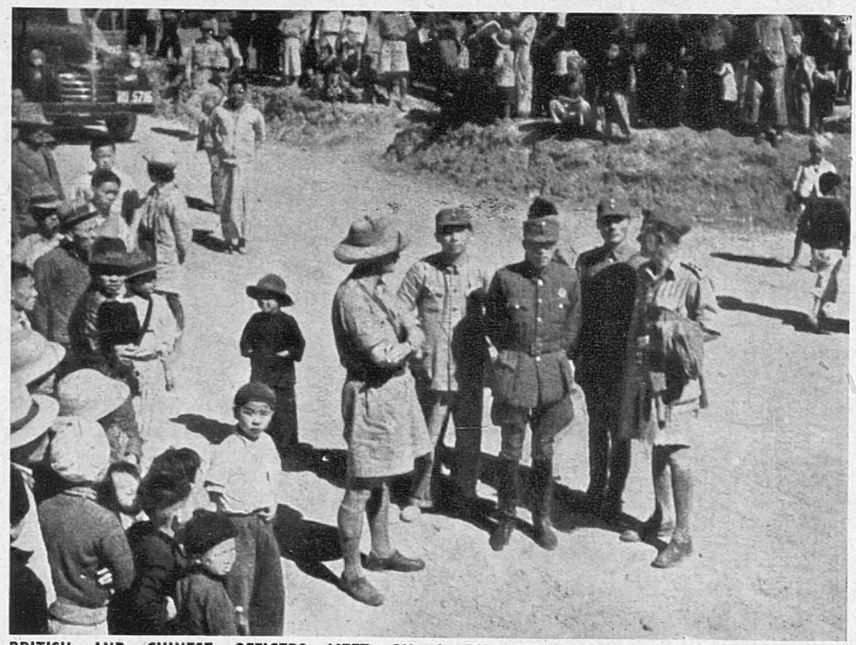
WORK ON THE INDIA-BURMA-CHINA RAILWAY LINK : Coolies cutting a shelf for the track alongside the Nam-Ting River. The labourers are given a certain area to work, and when this has been completed they are allowed to return to their homes

CHINESE TROOPS IN BURMA : A Chinese General, in command of a formation in Burma, with a British officer with whom he is co-operating



AYING A SECTION OF THE TRACK ON THE NEW RAILWAY LINE

hen completed, the new Yunnan-Burma Railway will connect with the angoon-Lashio Railway in Burma and then continue on to Kunming : it will upplement and relieve the congested supply route to China along the Burma oad and speed up Lease-Lend material from America to China. It will also e valuable for Chinese military movements to the Burma front. Most im- rtant is the fact that the new line will be the beginning of rail communications nking China, Burma and India. The Yunnan-Burma Railway, of nearly six ndred miles in length, was begun two years ago : now that the construction work has been so greatly speeded up, it should be completed very shortly



BRITISH AND CHINESE OFFICERS MEET ON A BURMESE ROAD : A picture taken when Chinese reinforcements passing through a Burmese village were met by British liaison officers. The meeting was a source of great interest to the local inhabitants !

BRITISH WOMEN AND CHILDREN EVACUATED BY AIR FROM BURMA : The civilians are sheltering from the burning sun under the wing of the R.A.F. aircraft which is to take them out of the country. Their luggage is, apparently, of the sketchiest character

# The WORK of the MINELAYERS

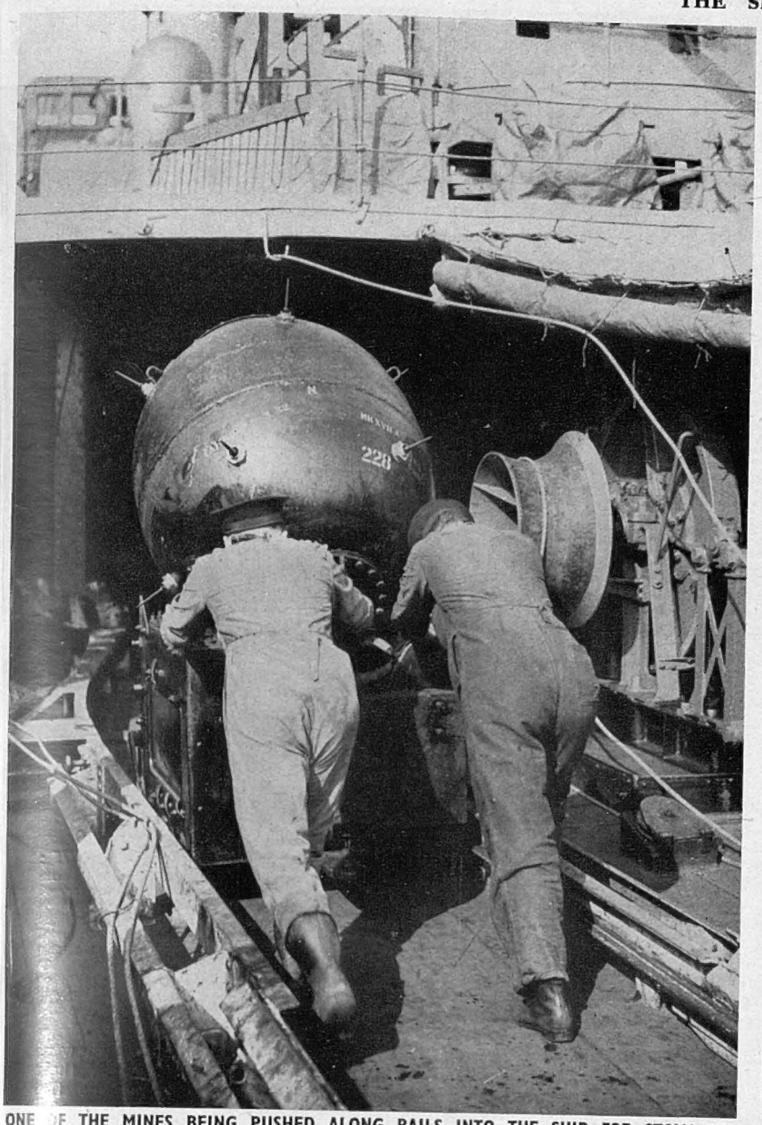
MINES BEING RECEIVED ABOARD A MINELAYER: These are placed into galleries which run the length of the ship: rail tracks are laid ready for the mines to be run out

HOW THE MINES ARE LOWERED from the quayside

Among the little-publicised—but nevertheless extremely dangerous—tasks of the Royal Navy is that of minelaying. Night after night the minelaying vessels slip out to sea, to lay fresh danger-fields for enemy warships round the shores of Britain and at the approaches to the enemy's shores. British minelayers have sown thousands upon thousands of these deadly mines in the shipping pathways frequented by the supply vessels of the Germans—a task fraught with danger, as the minelayers are liable at any moment to attack by E-boat or by hostile aircraft—and with a deadly cargo on board! The minelayer is usually a small vessel, well under one thousand tons in size. When the mines are received aboard, they are not equipped with "horns": the task of attaching these is carried out by the crew

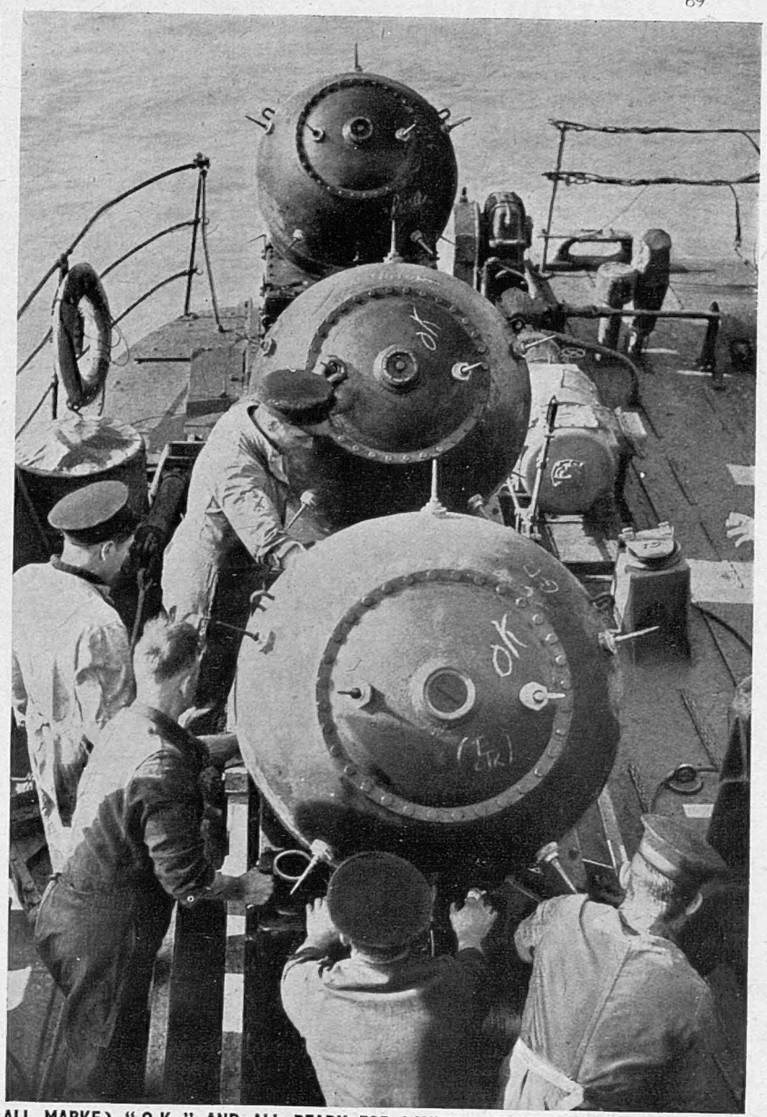
MEMBERS OF THE CREW FIX THE "HORNS" TO A MINE: If a vessel were to touch any of these spiky projections the mine would explode immediately

THIS IS NOT AN OUTSIZE IN MINES—nor is the sailor marooned! He is one of the crew of the minelayer (wearing a lifebelt) on a mooring buoy, hauling on a rope to help his vessel to a safe anchorage



**ONE OF THE MINES BEING PUSHED ALONG RAILS INTO THE SHIP FOR STOWAGE: Its "horns" have already been placed in position**

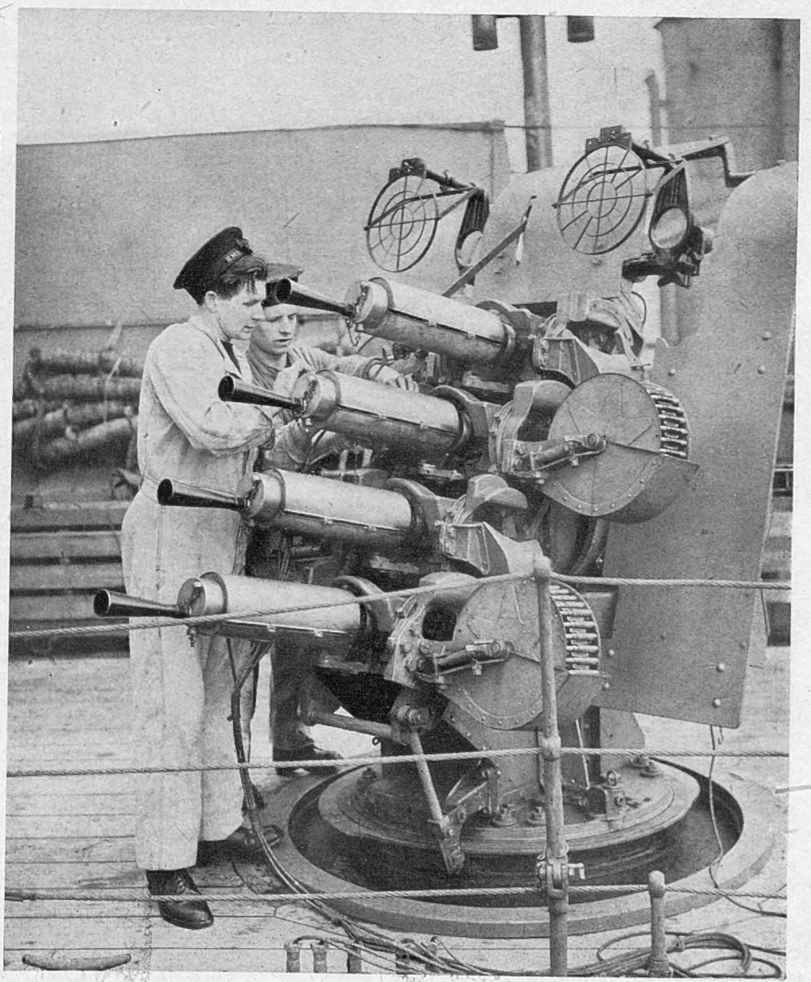
At top and bottom, and around the sides, are a number of what look like spikes: these are the "horns." When struck by a passing vessel, these horns detonate the great load of explosive within and terrific damage is caused. During the last war, in one year and in the Bight of Heligoland alone, one hundred German vessels were destroyed by this means!



**ALL MARKED "O.K." AND ALL READY FOR LAYING: The mines are on their rail track. Later, they will be launched over the stern of the vessel**

**ROLLING BANDS OF A.-A. BULLETS on to drums for the multiple A.-A. guns**

The latest and best type of anti-aircraft guns are fitted on British minelayers; but it is not usual for these vessels to have other types of armament. The chief menace to-day comes from fast-moving E-boats and from aircraft. In both cases the multiple machine-gun is the most effective weapon



**THE SAFEGUARD AGAINST LOW-FLYING BOMBERS: Multiple A.-A. guns on the deck of the minelayer being cleaned for action, ready to repel air attacks**

# PAUL REYNAUD'S "J'ACCUSE"

*A Very Remarkable Document which the Fighting ex-Premier of France Sent to Philippe Pétain, the Ruler of Vichy, after His Imprisonment. A Copy of this was Smuggled Out of France, and Vital Portions of it are Given Below. Amongst Other Things it Tells the Inner Story of the Franco-British Union Proposed by Winston Churchill, and the Truth about the Proposal to Carry On the Struggle from North Africa*

By FERDINAND TUOHY

LAST week I set down how the Riom Trial had turned against its instigators, and alternately placed Pétain and Hitler in the dock instead of Blum and Daladier. No matter how it may be adjourned or snuffed under, this assize has already taken its place among the historic trials of France. It has been remarked, however, that the prisoners' bench was notably incomplete. Where were combatant little Reynaud and staunch, disdainful Mandel? The answer, I venture, is likely to be found in the terms of a letter which Reynaud addressed some time ago to the Marshal, and which was recently smuggled into this country.

Reynaud would have spoken like this letter, giving off his brilliant sparks the while, had he been brought before the equitable Judge Caous and his *aides* at Riom; and as for Mandel, the spirit of his chief, Clémenceau, would have directed his *épée* in coolest play and thrust. So Pétain wasn't having any. Instead, Absolute Philippe decreed that the formidable couple were to be incarcerated *sine die* in "the Bastille of the Pyrenees," the forbidding and inaccessible Fort de Portalet.

Maybe the idea was to see first how the Blum-Daladier trial passed off. If that be the explanation, the chances are strongly that Reynaud and Mandel will continue to remain untried, even uncharged. Only should Vichy decompose and the French Nazis of Paris become the ruling puppets of Unoccupied France under a Stathalter such as Laval, would the Premier in the last days and his Home Secretary be "tried" and sentenced. Nor would the sentence be in much doubt. Philippe Henriot, star publicist of the French Hitlerites, names Reynaud, Mandel, Herriot, and ex-Foreign Minister Auriol for "the second tumbril," while the Nazi tool, Doriot, in announcing that he had been asked to join the Vichy Government, said he had requested the assurance that Reynaud, Mandel and Blum would be shot.

As anything may happen governmentally in the Vichy zone this summer in response to the fortunes of the fight, now is the moment to hear Paul Reynaud in the role of accuser, and, fortunately, one can visualise this game little Frenchman in the very court-room at Riom, by noting the points he makes for "Monsieur le Maréchal." The full letter extends to nearly 3,000 words, but here are its essentials:

"It is untrue that the British Government pressed us to continue the war from North Africa. You know better than anyone, for having assisted daily at my Cabinet meetings, that *I* took this decision in keeping with our engagement not to abandon one another, an engagement which you recognised on entering my Government, and which you never asked me to denounce.

"It is untrue that General Weygand urged me in writing on May 29 and June 7 to conclude an armistice. On the contrary, he wrote on June 10 that he had 'far from lost hope,' while at the Council which you attended at Briare on June 11, he said: 'Nothing indicates that we may not pull it off in the last quarter of an hour.' A flagrant untruth was put out on your radio in order to substantiate the argument that 'if Weygand had been listened to, Italy wouldn't have entered the war.' This not only radically misread the psychology of Italy's rulers, who would never have renounced participation in the carving of our remains; it reposed on an utter falsehood, inasmuch as Italy declared war on June 10.

"It is untrue that the armistice 'spared French families a useless sacrifice of their children.' Directly the High Command declared the struggle to have become impossible, I proposed to stop it on French metropolitan territory, as was done in Holland, and had I not been driven from power, the losses suffered while obtaining the armistice (June 13-25) would have been avoided. To accuse my Government of estimating that 'not enough French blood has flowed,' is to have recourse to methods unworthy even of a public meeting. What happened was that your Coalition proceeded on the premise that 'England will within three weeks have its neck wrung like a chicken.'

"It is untrue to say that conditions would have been less onerous if the armistice had been concluded earlier. When General Weygand asked for the armistice at Cange on June 12, our armies had succumbed in metropolitan France. Germany showed, and shows every day, that it intends to draw the maximum from its victory both inside and outside the armistice terms.

"It is untrue that at the Supreme Council at Briare on June 11 (not June 13 at Tours), Mr. Churchill refused all further R.A.F. aid. He undertook to go into the matter directly on his return to London. It is no less untrue that 'for weeks our soldiers in vain awaited British fighter planes.' On my daily solicitations, we received important R.A.F. assistance. In the light of what subsequently happened [Battle of Britain] no one can reproach Mr. Churchill for not flinging into the Battle of France the whole of an air force upon which our chance of victory to-day depends.

"It is untrue that President Roosevelt replied 'evasively' to my appeal of June 14. This is to suppress the importance and generosity of his reply. He gave an assurance that 'as long as France continues to fight, she can count on receiving war material and stores in ever-increasing quantities.'

"It is untrue that the offer of a Franco-British Union made to us on June 16 would have 'reduced us to the status of a Dominion.' This offer was for union on a basis of equality, and I was on the point of accepting. I prefer to collaborate with our allies than with our enemies.

"It is untrue that the text of this offer was 'telephoned from London by General de Gaulle at the dictation of Mr. Churchill.' As the General, a member of my Government, was sent by me on a mission to the British Premier, there was nothing wrong in his telephoning the text, but Mr. Churchill telephoned me later, asking my reaction. More perfidy in the insinuation that at my end of the wire, 'as by chance, was General Spears.' This officer, one of France's most devoted friends, was properly accredited to me in my post of War Minister, and what more natural than that he and his Ambassador should visit me on such a day? I permit myself to think that backstair gossip of this description is unworthy of a great nation. Nothing is more contemptible than constant attacks on the rulers of a people whose heroism will assure our salvation."

Half-way through his indictment, Reynaud passes to his own responsibility for the military preparedness of France. As neglect to provide adequate means was the basis of the charge against Daladier, Blum and the others, here presumably is how Reynaud would have put it in court:

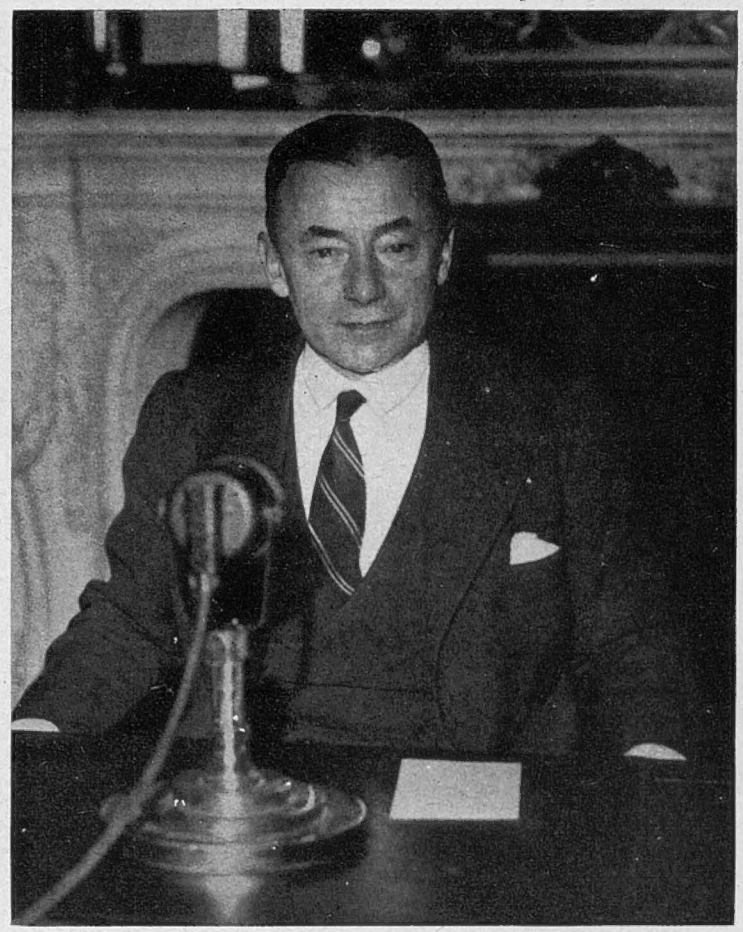
"Do you imagine that French people are still ignorant of the fact that our High Command affirmed that a continuous front from the North Sea to Switzerland was invulnerable, and that the enemy would only provoke ruptures which would be all the more dangerous for him the deeper they grew? Do you think French people don't know yet that General de Gaulle affirmed, on the contrary, that an armoured corps, of which he gave the composition, would be able to pierce at a given point this continuous front? Or that, on March 31, 1935, five years before the German break-through, I tabled a project in Parliament creating such an armoured corps? And that I declared that the German Army would pass by Holland and Belgium, knocking the Belgians back from the Albert Canal, and attacking our northern frontier, which our High Command declined to fortify?

"Or that I went on record to the effect that we could be invaded by a German Army composed of armoured divisions and supported by aircraft unless we equipped ourselves with an armoured corps which alone could permit us to take a victorious counter-offensive? Do you think French people have forgotten that my plan was turned down as being 'contrary to the logic of history,' though the Germans adopted it? Do you imagine it is forgotten that for years, in books, speeches and articles, I urged my plan? You, Marshal, know better than most how my plan was combated, for, on the eve of the war you introduced a book which contained this: 'As for tanks which were to have brought us back to short wars, their failure is self-evident.' This may not be the moment to argue such matters, with the enemy occupying two-thirds of our territory, but in awaiting truth silence is better than lies, and modesty than provocation. The danger of all these lies and calumnies is that truth is a gas which explodes in proportion to how it has been stifled. I solemnly warn you that the reaction will be brutal.

"Your attitude to me has been very different from what mine was towards you. After you secretly put me in prison, forces speaking in your name said: "You see that man behind bars? In passing, you can spit in his face.' I never dreamt of incarcerating those of my colleagues who, like yourself, disagreed with me concerning the armistice. Well, keep me in prison, if that appeals to you. Our persons count for little. But listen to a Frenchman's advice, and order them to stop telling the nation that France's word doesn't matter, that we didn't need to keep it with Poland on September 3, 1939, or with England on June 16, 1940. Order an end to our youth collaborating with an enemy who has annexed Alsace-Lorraine and whose flags wave over Paris. Order an end to the blackening of a stoical people, our Ally, upon whom depends our salvation. There is not greater peril for a nation than the degradation of its soul."

Reynaud asks Pétain why he lent his prestige to all these lies; but that was before Riom. In his mountain prison on the Spanish frontier, 2,000 feet above the pleasant Pyrenean town where Foch was born, Reynaud doubtless doesn't know how the Riom Trial has turned. But we do, and we know (*a*) that the Pétain regime seeks to bolster itself by inventing guilt for its political predecessors; and (*b*) that the three persons most responsible for turning down Reynaud's project of an armoured corps were Pétain, Weygand and Gamelin, respectively heads of the Army through all the years involved. No wonder the military hierarchy wasn't keen to arraign Reynaud, the incisive lawyer, with all the facts ready, until it saw how Blum and Daladier fared.

Pétain strives to resurrect the absolutism of the Sun King, by imposing the same monarchist, clerical and military hegemony that Louis XIV knew how to amalgamate. So Reynaud was pushed into the background, as potentially holding the most dynamite for hurling at the military machine. Salute to him now, an honest, generous man, whatever his shortcomings, in his prison "cut in a vertical rock, 400 ft. in height and approached by no fewer than 506 steps." The Fort was built to house 3,000 soldiers of the Republic. To-day it houses two, and one's hope is that each will come through to safety one day, though that is far from being certain.



**THE LAST PREMIER OF FRANCE UNDER THE CONSTITUTION OF 1875:** M. Paul Reynaud, now incarcerated in the forbidding Fort de Portalet in the Pyrenees at Marshal Pétain's orders, was the last Constitutional Premier of France. He followed M. Daladier in that high office, and resigned on June 16, 1940, after the seat of Government had been moved to Bordeaux and after his Cabinet (by 13 votes to 11) had agreed to ask Germany for an Armistice. His trial (with M. Mandel) is to take place after that of Messrs. Daladier, Blum, Gamelin and others now at Riom. But, in view of the disclosures made in his letter to Marshal Pétain (details of which are given by Mr. Tuohy in the accompanying article), it is now considered doubtful whether the fighting little ex-Premier will ever be called to the Court Room

# THE NAVY'S "COMMANDOES"

## The Sailors who are Being Trained to Strike at Enemy-Occupied Regions

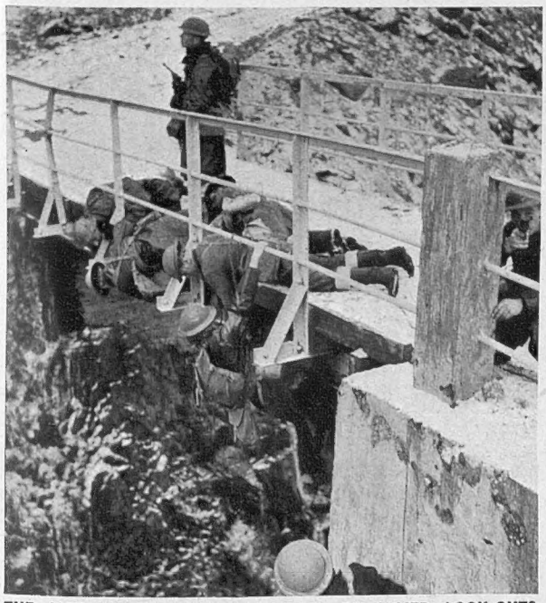
*—Special Admiralty Pictures*

The series of pictures reproduced here show sailors of the Royal Navy being trained for demolition work in enemy-occupied countries. During training, ratings are instructed in the laying of charges and detonators for the destruction of enemy property and installations and defences: and they operate under similar conditions to those which would occur during an actual landing in hostile territory. Whilst one section of a party is laying telephonic communications and preparing the ground for an attack, their comrades guard them with revolvers and hand-grenades from the cover of rocks. The men are led by specially-trained officers, who teach them the art of taking cover and harden them with long treks over rough country

**RATINGS, DRESSED IN SPECIAL RAIDING GEAR,** on the deck of a warship before being transported to shore. Each man carries with him some vital weapon or apparatus

**RAIDERS CARRYING LENGTHS OF CABLE AND EQUIPMENT** through a mountain stream on their way to the rendezvous for demolition work

**A NAVAL DEMOLITION PARTY LED BY OFFICERS,** creeping up to a vital position on a bridge-head to lay charges and thus destroy it. Ratings are seen placing the charges in this bridge spanning a rapid stream



**THE MEN AT WORK ARE COVERED BY ARMED LOOK-OUTS.** Speed and sureness are essentials in this operation

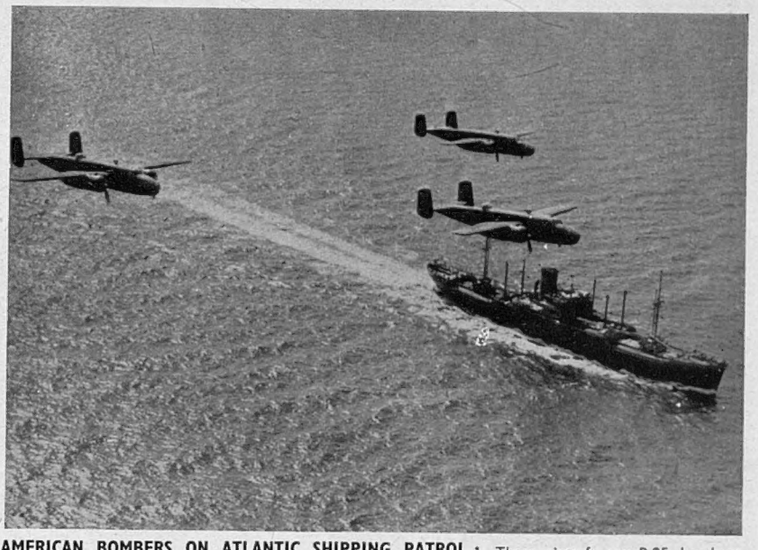
**A RAIDING PARTY COMMUNICATING BY TELEPHONE WITH A RECONNOITRING PARTY** which has gone on ahead. The men on the left are being covered by the well-armed party on the right

# WAR PICTURES from the U.S.

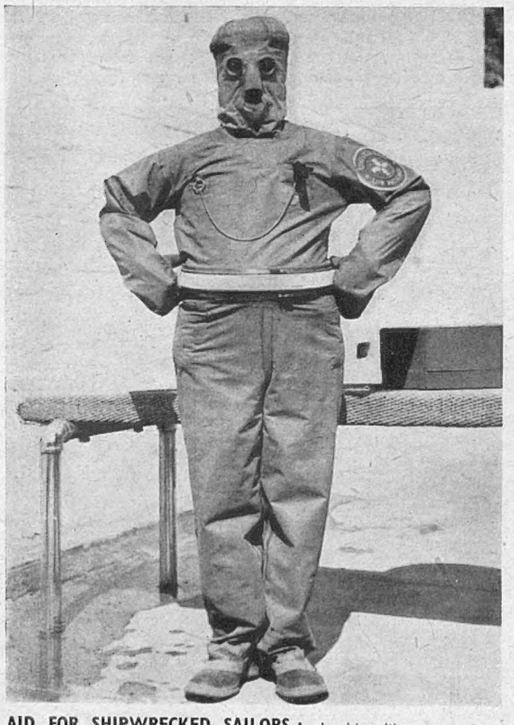
**THE JAPANESE IN CALIFORNIA are sent to neutral areas :** At Manyanar, in the State of California, an evacuation centre has been established for more than 60,000 Japanese evacuated from the defence areas around Los Angeles. Here the enemy aliens will soon be living and working where they can do no harm. Note the food supplies in the foreground ready for the kitchen staff to take over for the preparation of meals

**CANADA APPROVES THE U.S. ROAD THROUGH TO ALASKA :** Mr. Mackenzie King, Prime Minister, is here signing the Agreement under which the U.S. will build and maintain a highway connecting up with Alaskan air bases and leading from Fort St. John, in British Columbia, to Alaska. The American Minister to Canada, Mr. Pierrepont Moffat, is watching Mr. King affixing his signature

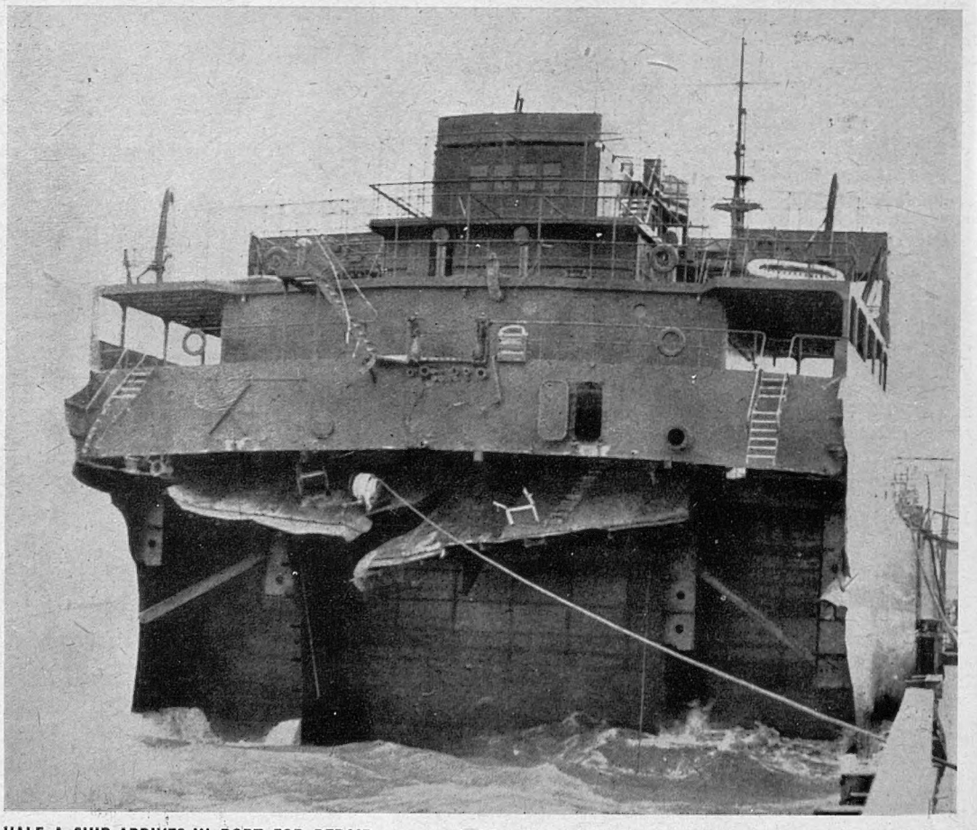
**ITALIAN FISHING-BOATS BARRED FROM BOSTON HARBOUR :** One hundred small fishing-boats are now lying idle at Boston under an Order which affects some five hundred Italian fishermen. The boats are no longer allowed to operate off the eastern coast, as it is thought that some might take oil or other supplies to enemy submarines lurking off the United States seaboard



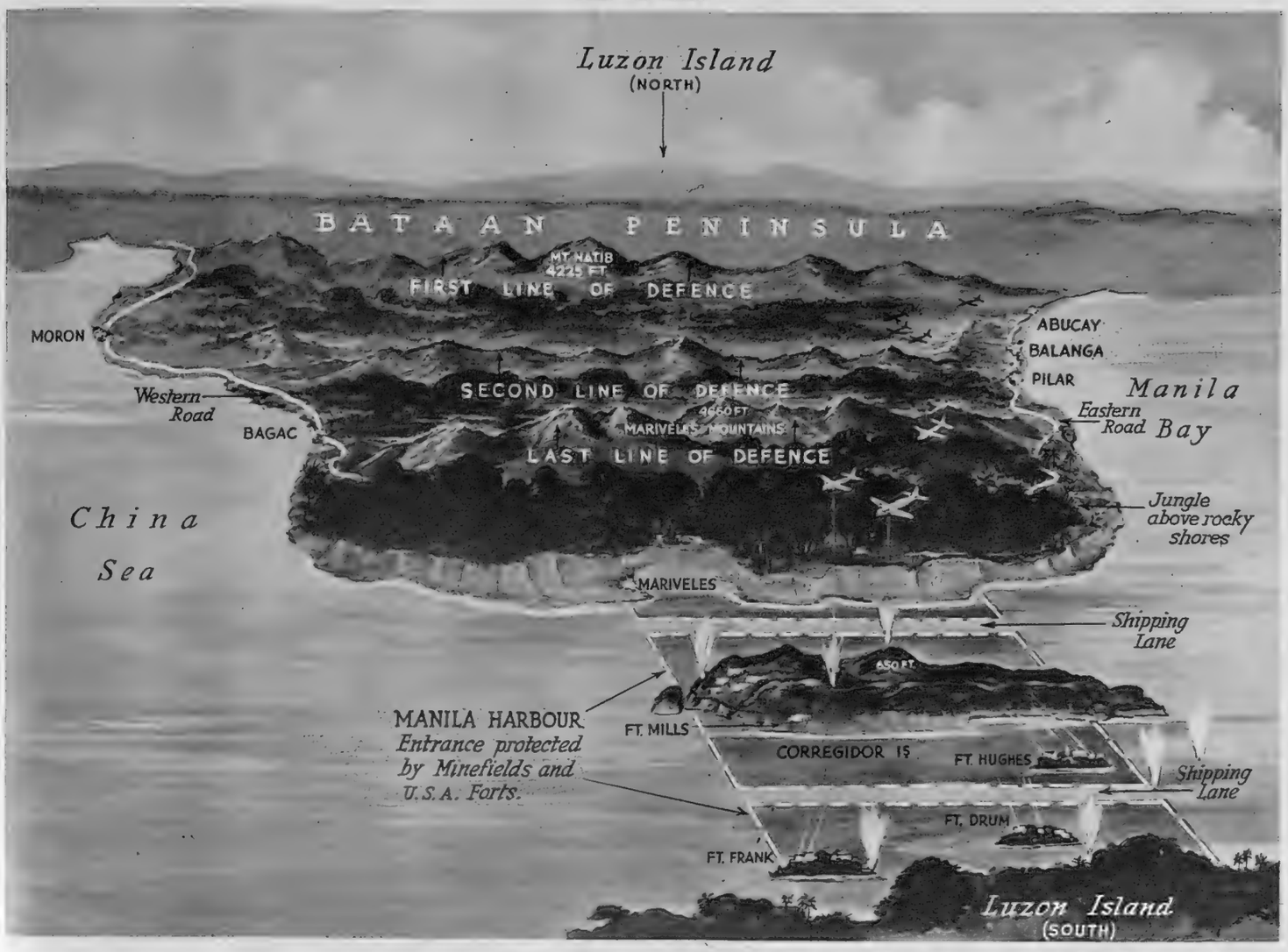
**AMERICAN BOMBERS ON ATLANTIC SHIPPING PATROL :** These aircraft are B-25 bombers of the U.S. Army : they are checking up on a seagoing vessel. They are part of the Command of Major-General Follett Bradley, Head of the U.S. Air Forces, Eastern Defence Command, and First Air Force. It is planes of this type, charged with the defence of the Atlantic coast, which have already sunk a number of submarines operating within that area



**AID FOR SHIPWRECKED SAILORS :** Looking like a man from another world, Captain S. Kronhaus, of Los Angeles, wears his newly invented life-saver, a rubberised water, and air, tight suit which can be donned in less than two minutes and will keep the occupant afloat indefinitely. A small opening at the nose brings in the needed air for breathing and for the inflation of the suit



**HALF A SHIP ARRIVES IN PORT FOR REPAIR—a remarkable picture from Virginia : This vessel is the *E. H. Blum*, a tanker of some size. After her stern had been damaged at sea, watertight bulkheads made it possible for part of the ship to make port safely. This is how she arrived at Norfolk, in Virginia, where she is now undergoing repairs. It will not be long before the *E. H. Blum* is again at sea!**




**WHERE GENERAL MacARTHUR AND GENERAL WAINWRIGHT HELD OUT FOR FOUR MONTHS AGAINST OVERWHELMING JAPANESE FORCES: The U.S. defence system on the Bataan Peninsula in the Philippines, and how it was linked up with the Corregidor Islands and fortresses**—*Drawing by W. Brownlee*

# THE EPIC OF BATAAN

Towards the end of March, after almost four months of continuous fighting, the Japanese Command evidently determined to crush the brilliant defence of the Bataan Peninsula. General Wainwright (who had taken over the command after the retirement of General MacArthur to take up the Australian Command) held on as long as his troops could endure the continuous strain. From sheer fatigue, induced by the defenders having to stand guard almost continuously through the twenty-four hours, the end came towards the close of last week. General Wainwright himself succeeded in moving the command to Corregidor.

The defending force consisted of the 31st Infantry Regiment, crews of two tank battalions, units of mechanised artillery, Air Force ground staff and sailors and marines from Cavite. When the defence was overwhelmed, General Wainwright's effectives numbered 36,853. This did not include the wounded and some 6,000 Filipino labourers. *The air defence* originally numbered about 5,000, of which 2,000 fought as infantrymen when their planes gradually passed out of action.

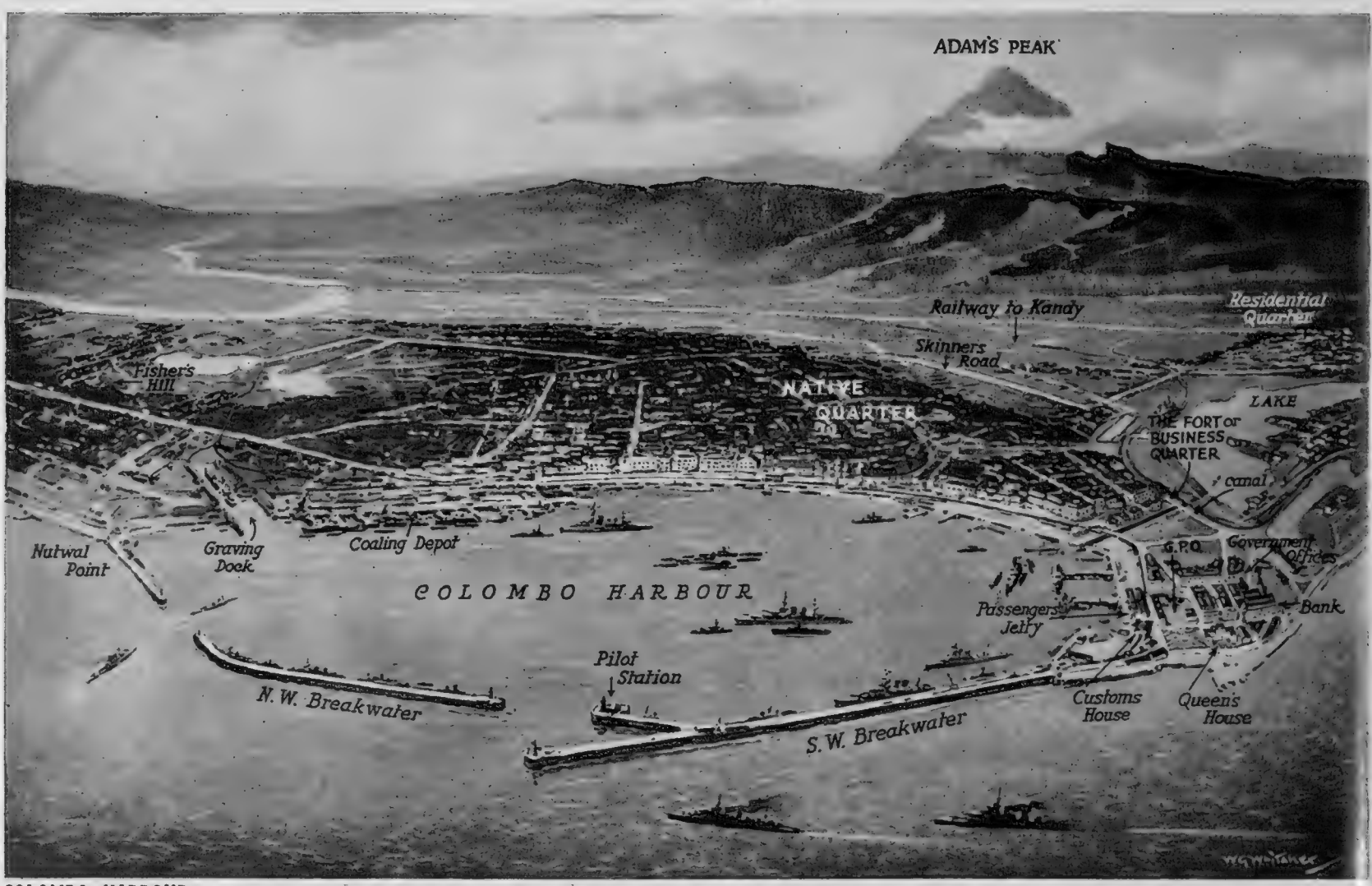
In the above drawing the rocky southern shore of the Peninsula is shown with its jungle covering. It remained to be seen whether the Japanese would mount artillery on the headlands and increase their attack on Corregidor. The latter is well protected with its system of underground passages and batteries, but the questions of ammunition supply and food were evidently serious problems before the defenders

**HOW THE JAPS BOMBED MANILA: A general view of Taft Avenue following a fierce and relentless raid by Jap bombers:** This picture has only just reached England, as communications with the Philippines have not been easy!

**BARGES IN THE NAVY YARD AT CAVITE, the U.S. base near Manila, burning fiercely following a heavy Japanese bombing raid. After the fall of Manila, the enemy made great use of this base for further attacks against the Bataan Peninsula**

**A JAPANESE BOMBER IS SHOT DOWN BY AN AMERICAN PILOT, and is finished off by the guns of a U.S. aircraft-carrier. The column of smoke marks the spot where the bomber crashed. It had been attacking the Carrier (on left) in the Pacific when it was disabled by the American pilot, Lieut. Edward H. O'Hare; the Japanese pilot then tried a suicide dive at the Carrier, only to be blasted by the ship's anti-aircraft guns when 200 yards short of the target**

b




**COLOMBO HARBOUR, CAPITAL OF CEYLON AND BRITISH NAVAL BASE IN THE INDIAN OCEAN**—The Harbour and the City seen from the West, with Adam's Peak in the background. The harbour is an artificial one, but it is one of the finest ports in the East—*Drawing by W. G. Whitaker*

**TRINCOMALEE, THE GREAT NATURAL HARBOUR ON THE EAST COAST OF CEYLON, which is reported to have been reconditioned as a naval station overlooking the Bay of Bengal. It lies on the opposite side of the island to Colombo, and has been heavily bombed by the Japs**—*Drawing by W. G. Whitaker*

## INDIA IN DANGER

Cities in the Eastern Zone which Lie Under Immediate Threat from the Japanese

—*Special Sphere Drawings*

## The LAST SEA SENTINEL EAST of SUEZ

*A Note on the Defence of Ceylon*

CEYLON, British Crown Colony, is an island of 25,481 square miles (or three times as big as Wales) at the south tip of India; its population is about five million (or over three times that of New Zealand), and its principal products are tea, rice, rubber, coconuts and spices. The capital and chief port is Colombo.

That *was*, till a short time ago, Ceylon. But within the last few weeks the same island has become a second Gibraltar, Malta, Corregidor, Heligoland, Singapore; and the vital question now is whether history, in respect of the Singapore comparison, is going to repeat itself.

This is the position. Ceylon stands just where the real tussle in Britain's war with Japan must develop, at the point where the sea routes from Suez and Africa switch north to Madras, Calcutta, and the new entry to the Burma Road. Also she could either protect or admit invaders to the vulnerable southern half of India itself.

So Ceylon must now expect (1) heavy work at marshalling convoys, preparing and despatching

**MADRAS, THE GREAT INDIAN PORT, WHICH HAS NOW COME WITHIN RANGE OF JAPANESE AIR ATTACK.** This famous city of the Coromandel coast is now threatened by enemy submarines, which have been reported only ten miles away from the mainland. Madras is the third city of India, the fifth seaport of the Indian continent and the chief port of the Deccan—*Drawing by E. G. Lambert*

**CALCUTTA, CAPITAL OF BENGAL AND FIRST CITY OF INDIA, seen from the south as one approaches it up the Hooghly River. Many of the principal buildings and landmarks of the Bengal Capital are indicated here**—*Drawing by E. G. Lambert*

escorts; (2) frequent raids by Japanese air and naval forces; (3) invasion. What are her chances?

The factors against the island are many, the most important being Britain's neglect of her defences ever since the island's capture from the Dutch in 1793. Who would have thought that all the defensive positions from Hong Kong backwards through Indo-China, Malaya and Southern Burma would fall in a few months? *Who?* Then Ceylon has also the disadvantage of being a soft tropical land, with vulnerable coastal strips and a very mixed population which, like others in the East, has recently grown contemptuous of British rule.

In favour of successful operations in and from Ceylon may be cited: the construction of the new naval and air bases at Trincomalee; the Government's prompt action in appointing Admiral Layton and General Pownall as Service chiefs there; the lessons learnt by the High Command in the Malayan and Burmese fighting; the sheer distance from the nearest Japanese base.

The base at Trincomalee was put down for remodelling in 1939 at a cost of £1,500,000—not much compared with Singapore's £20,000,000, but enough to provide this finest of harbours east of Suez with modern installations on a modest scale. Besides, Singapore demonstrated that installations in themselves were useless without ships and aircraft.

So the effective use and defence of Ceylon depends as ever on a wartime imponderable: how many warships and planes can be mustered there from the West Indian ports, from the Persian Gulf, Aden, Suez, and East Africa, and how many can be spared as further reinforcements from the Mediterranean, Atlantic and North Sea.

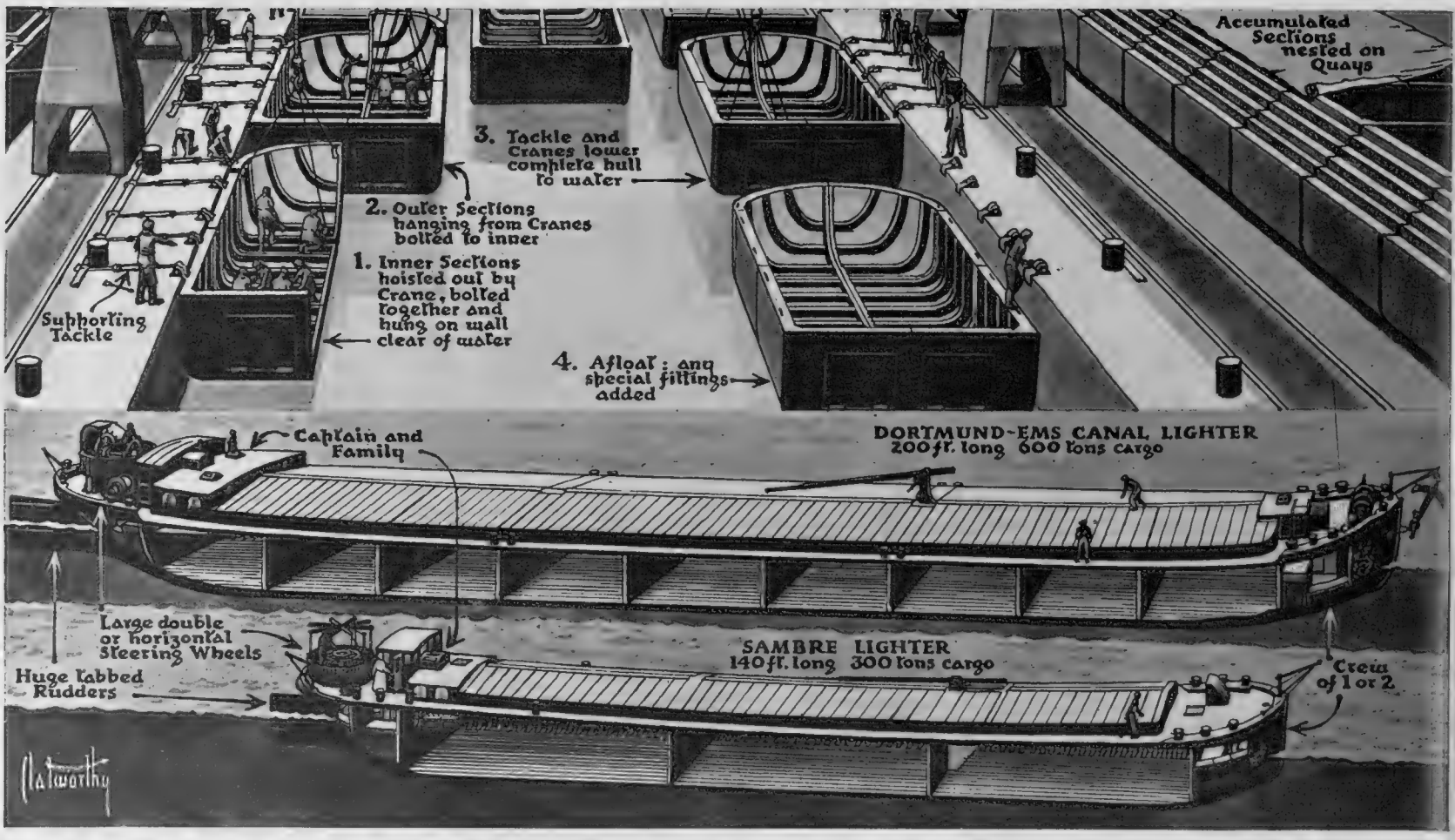
Perhaps just enough may be spared, in view of the shorter communications between Ceylon and the reinforcement sources. The Japanese, already far extended, and heavily involved with American and Australian forces, are at the nearest 900 miles away, at Sumatra, and 1,230 miles away, at Rangoon. (Leaving out of account the Andamans, where they can hardly establish themselves yet in force.) These are greater distances than they had to cover in Malaya, when they came down by easy stepping-stones all the way.

Therefore it does seem as if Ceylon may have a good chance, *provided* the Japanese do not secure complete mastery of the Bay of Bengal and that we do not bungle hopelessly the sending of reinforcements. But supposing that they did cross the wide sea and effect landings?

Unless we had a really strong army and air force in Ceylon the invaders would be able to employ their Malayan tactics all over again. Trincomalee is on the north-east side of the island, surrounded by country like Johore, only more tangled. The defence scheme would have to include a strong-point system and clear paths for constant reinforcements over the central hills from Colombo, on the other side.

What would be the consequences of defeat? First: the strategic impotence of India, grasped between the Japanese in Burma at the north-east and the Japanese in Ceylon at the south-east. Second: the final severance of the sea routes to Madras, Calcutta, and Western Australia from Bombay. Third: the loss of a good quarter of the Empire's tea, much rubber and rice, copra, vegetable oil, fibre and graphite. Fourth: the imminent strangling of the vital supply routes to Russia through the Persian Gulf, and the Middle East through the Red Sea, and, perhaps, the introduction of a new enemy to Africa.

D. C.




**GERMAN DEVICES FOR CARRYING OUT AN INVASION BY BARGE: Above, by building big barges in sections the enemy might hope to elude aerial reconnaissance; below, the German and Belgian types of barges already available to the Nazis in large numbers**—*Drawing by S. W. Clatworthy (Artist's Copyright in the U.S.A.)*

The drawing above contains two diagrammatic comments on Invasion possibilities. In the upper part, it is suggested that barges prepared and stacked in sections might pass unrecognised as such during aerial reconnaissance flights by the R.A.F. The barges would then have to be assembled immediately prior to use: the diagram shows how this could certainly be done, and illustrates the assembly and the launching of the barges stage by stage. *But*, numerous gangs of men would still need many hours to put the Invasion fleet into the water, during which time they would form a fine objective for bomber and fighter aircraft of the R.A.F. Fog might be useful, but it would be a dangerous ally to count on for a protracted period—and, further, once completed, the barges would have to be put to immediate use and before their existence became known. The barges depicted in this portion of the drawing are 50 ft. long and carry 50 tons

The lower diagram illustrates two notable examples of the huge river-lighters which are already in existence and available to the Germans in great numbers in France, Belgium and Holland, as well as in their own country: each design is peculiar to its own waterway. On their passage across the Channel these barges (as well as those mentioned previously) would be extremely vulnerable under attack by R.A.F. bombers! Even larger than the German and Belgian types, typified in the Sambre lighter, are the huge Rhine barges which are built up to a length of nearly four hundred feet and are amongst the world's largest. But these have normally to be loaded and unloaded with the greatest care to avoid dangerous distortion: they would certainly buckle and break in the Channel in anything except a dead-flat calm. None of the larger lighters are self-propelled, all of them needing tugs for their journeys along the Continental canals

THE "INVASION SEASON" IS UPON US AGAIN

# INVASION BY BARGE?

*How Would it be Carried Out by the Germans; and from which Direction Would Invasion Come?*

By FRANK ILLINGWORTH

WITH monotonous regularity, Whitehall charges us to watch from the cliffs and the beaches for the long-heralded invasion of Britain, and though the threat of attack no longer carries the implications of 1940's hectic summer, the passage of the *Scharnhorst*, *Gneisenau* and *Prinz Eugen* through the Straits of Dover suggests that, given suitable weather conditions, an element of surprise, and at least local aerial superiority, major landing operations might be accomplished at a price.

How does the enemy propose to transport troops and tanks across the seas; from what points will the attacks be launched; and what are the salient features of his invasion craft?

At a rough estimate, Germany has 300,000 barges at her disposal, comprising specially constructed metal craft (made in sections), together with French, Belgian, Dutch, Danish and German commercial barges, many of which have been ingeniously converted to military purposes.

Most Nazi troop-carrying barges appear to be self-propelled. Both men (approximately 150 per barge) and equipment are carried below decks. The latter, not infrequently armoured against aerial cannon and machine-gun attack, are bare except for wheel-houses and hatch-covers and bollards. Bows are designed so that troops can step straight ashore as barges run up steeply-shelving beaches.

German tank-carrying barges are mainly of the "half-barge" type. Sixty feet long, engineless, rudderless, flat-bottomed, drawing about 4 ft., their square sterns contain a "door"—rendered watertight in the "up" position by rubber edging, and hinged at the bottom—which, when lowered, permits speedy unloading of tanks under their own power. Tugs provide the barge-power, and it is estimated that barges laden with up to twelve tanks would make the Channel crossing at approximately six knots. Some tank-carrying barges are self-propelled, power being provided by obsolete aero-engines. The latter have less space for armoured units, though this drawback may be considered outweighed by their greater mobility.

Presumably, barges would carry troops highly trained in the establishment of bridgeheads. There can be little doubt that picked corps have been practising embarkation and disembarkation along the occupied coast and in the Baltic. And their barges could provide a secondary purpose little less important than the transport of storming parties across the Dover Straits. By tying-up alongside each other, barges reaching British shores could form piers for the landing of troops and heavy equipment from deep-water transports—once bridgeheads are established.

Barges are particularly susceptible to aerial attack. On many occasions I have heard the dull rumble of British bombs from the direction of Calais "basins," seen the fires caused by aerial attack, and, if barge concentrations do not feature among R.A.F. targets as frequently as they did during 1940's summer, when the threat of invasion was very real, this does not mean Germany's main invasion ports—Calais, Boulogne, Ostend, Dunkirk, and possibly Brest—are not systematically reconnoitred. Numbers of commercial barges are in the normal course based on such inland centres as Bruges and Ghent, and although the R.A.F. undoubtedly finds it difficult to differentiate between purely commercial and military barges (and commercial barges used for military purposes), it is doubtful whether the enemy can concentrate sufficient numbers of barges for a full-scale invasion attempt without having them dispersed by bombing.

This is perhaps part of the reason why Germany has constructed specially made metal craft. Made in sections, these could be stored near suitable embarkation ports, quickly assembled and launched on hazardous Channel enterprises before the concentrations could be scattered from the air. They have other advantages: probably mass-produced, they are easily replaced; and they can be moved by rail

**AFTER THE INVASION, THE ENEMY COMES TO GRIPS WITH THE DEFENDERS: This picture came from Malaya after the Japanese had overrun the Peninsula. It shows a Jap tank put out of action after having been attacked by Australians, who blocked the road with tree-trunks and other obstacles**

**ONE OF THE DIFFICULTIES AN INVADING FORCE WOULD HAVE TO OVERCOME:** This fine picture shows belts of two-pounder shells being loaded into the pom-poms on board H.M.S. *Shropshire*, an eight-gun cruiser of the London class. Vessels of this type would certainly play a large part in operations against a sea-borne invader of Britain. The pom-poms shown here form only a small part of the cruiser's lesser armament; but close up, these two-pounder shells could work terrible havoc amongst invaders by barge!

to suitable assembly ports without arousing R.A.F. curiosity. Supposing the enemy managed to concentrate sufficient numbers of barges to make something more than a large-scale raid on the Kent coast, his barge formations would suffer tremendous losses in the Channel crossing. Even Rhine tugs, designed to overcome this swift river, could not, when laden with a string of barges, combat the currents sweeping Kent's south-eastern shores. And although self-propelled barges would prove less vulnerable from the air, they would nevertheless make excellent targets; and it is doubtful whether many would attain their chosen objective so long as British formations droned overhead.

At this point, the question arises: from which direction would an invasion attempt be made? In the first World War, the enemy planned, by means of mines, to block the Straits of Dover, thus delaying the passage of British Channel units through the bottle-neck into the North Sea. Thus time would be gained for rushing a fleet of transports under naval escort across the North Sea towards East Anglia or Yorkshire. In Germany, nine specially constructed embarkation piers were ready for use, together with steel lighters for disembarkation purposes, or, should the weather prove suitable, for the North Sea crossing.

Possibly the enemy has a similar plan to-day. But it is obvious that he would strike at more than one place. The distances involved in North Sea crossings from Norway render barges unsuitable. There remains the English Channel. Invasion by sea from bases between Cherbourg and Brest would prove hazardous in the extreme, for the invasion armadas would be subjected to continuous attack from British naval and air bases on their flanks. Turning eastward, the enemy finds the strategical aspect improves considerably, the narrow Dover Straits offering the greatest advantages.

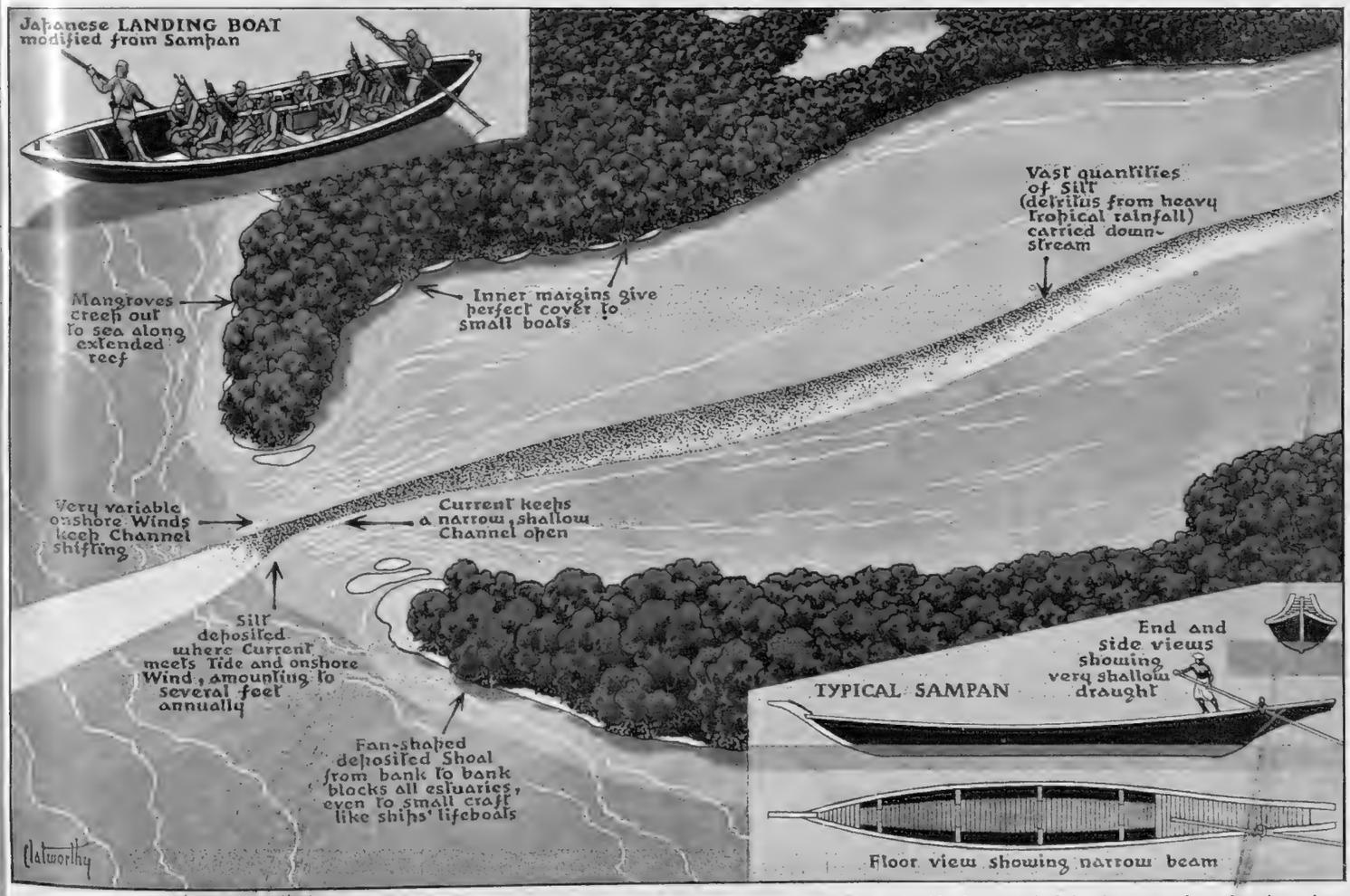
Now the question arises whether the sea route should be west or east of Calais. That to the west is preferable, with its advantage of a short crossing.

It is conceivable the enemy plan is an enlargement of that devised during the Great War: pass a North Sea invasion fleet on its way behind a necklace of mines laid across the Channel's throat; at the same time sending a large fleet of barges between two lines of U-boats, after further blocking the way to British naval reaction by mining the gates in the Channel mine-barrages, his barges being fitted with anti-mine devices and flanked with E-boats: supporting the "Dover Straits Armada" would be enemy longe-range artillery on the occupied coast, while the *Luftwaffe* would endeavour to form an umbrella.

But first, suitable troop transports must be concentrated. And experience proves this to be beyond the enemy's power so long as R.A.F. bases exist.

*Below*—As recent events have demonstrated only too well, the Japanese are fully acquainted with the geographical and topographical peculiarities of the South-Western Pacific. That they know how to take advantage of them we have learnt to our cost! The diagram below instances the form of river estuary met with throughout the Pacific regions: it also shows how the Japanese have utilised the local sampan, as well as special landing-boats of their own modelled on the latter, for use where the normal type of boat would be quite useless for Invasion purposes. One very important point is that several of such boats, owing to their very narrow beam, can comfortably be hidden *abreast* under the superabundant foliage which covers most of the Pacific Islands and islet.

The sharp, very overhung prow of the local sampan (and of the Japanese boat based on them) can be thrust well into the tangle of mangrove roots and thus give direct footing on to the island. The sampans are very sturdily built: the native types are usually composed of dug-out lower bodies, with built-up strakes forming the sides. The notorious Malay pirates of bygone days, in almost identical craft, used similarly to lurk in such estuaries before sallying forth to attack passing ships

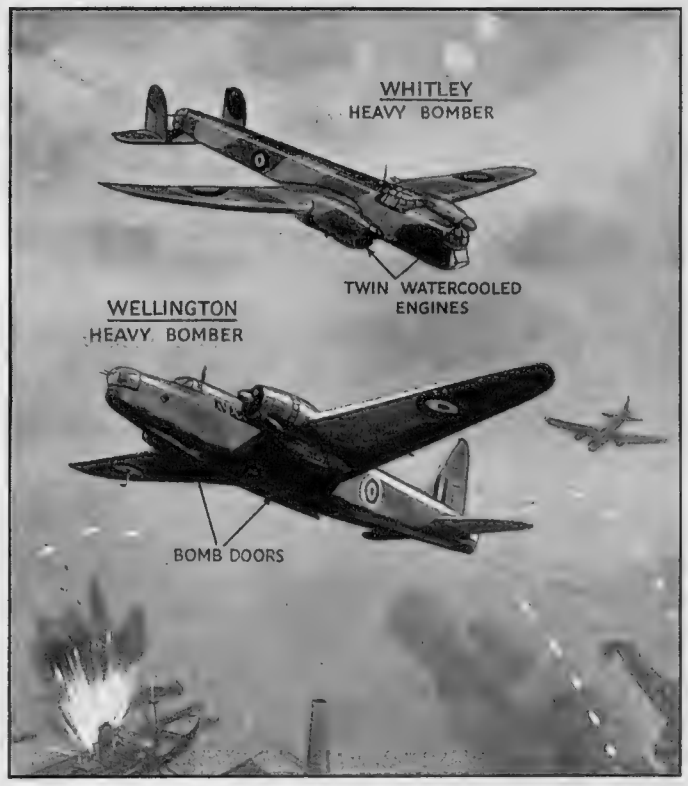



**INVASION METHODS OF THE JAPANESE IN THE SOUTH-WEST PACIFIC:** The employment of sampans has been a notable feature of their shore attacks: they have been especially useful in approaching shores covered by dense mangrove bushes (see note in box above)—*Drawing by S. W. Clatworthy (Artist's Copyright in the U.S.A.)*

C

**1. THE FAMOUS LOCKHEED HUDSON, employed on operational duties since the first days of the war**

Before the war the Civil version of the Hudson was being used all over the world as a transport plane. It went on to active-service duties on the first day of the war: since then it has been developed greatly, and now ranges far and wide with Coastal Command. Its principal activities have been over Norway and the North Sea. The Hudson is one of three American-built types (the others are Catalinas and Liberators) employed by Coastal Command




**2 and 3. THE WHITLEY, long-range and heavy bomber, and THE WELLINGTON, also a long-range aircraft**

For a good number of their heavy, long-range bombing raids, Coastal Command employs the Whitley and Wellington—two types of aircraft which enjoy a deservedly high reputation amongst bomber pilots and crews. The Wellington, in particular, has been greatly developed during recent months and now carries a much heavier bomb-load. The Whitley is famous, amongst other things, for its long-distance raids on Italy

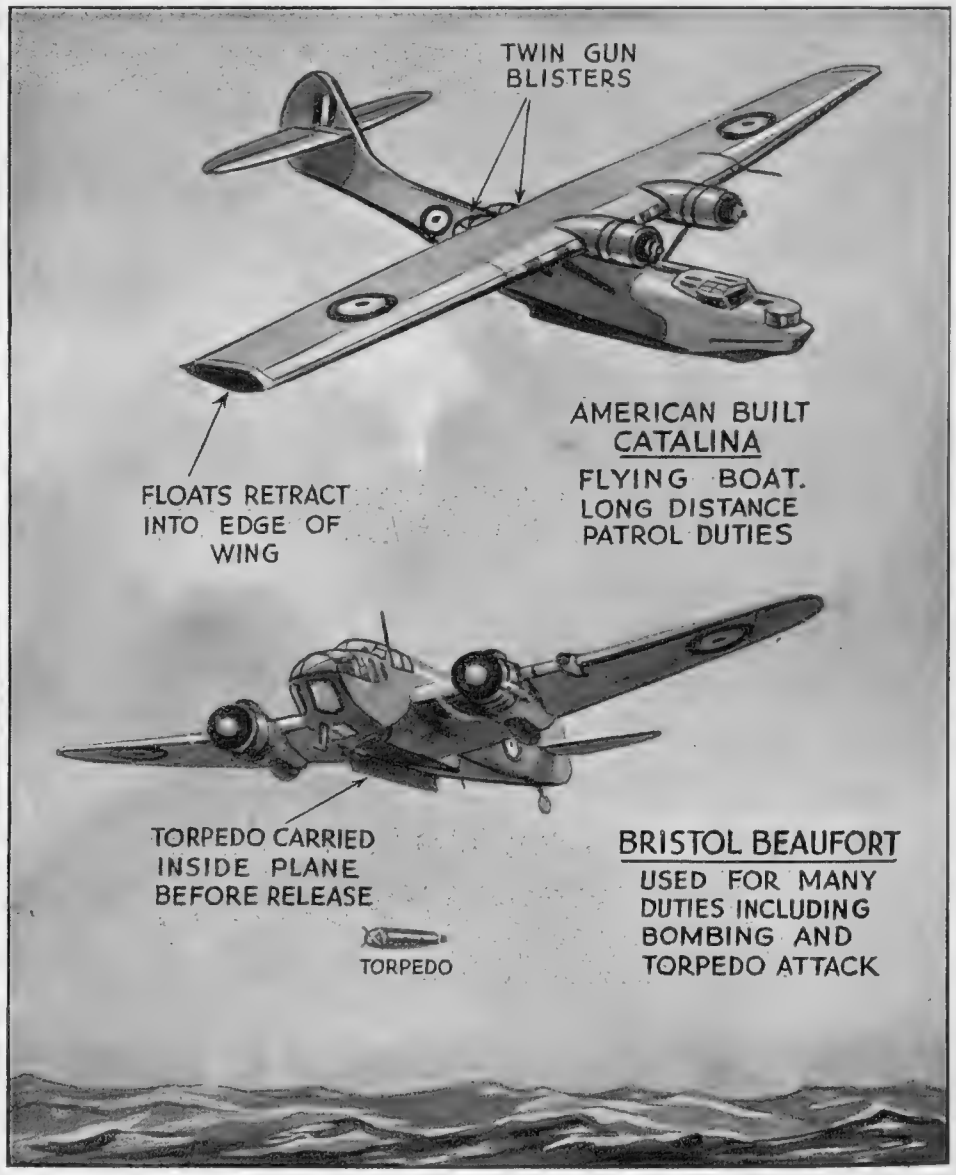
*Below*—The Catalina has a range of action of some thousands of miles: it has proved ideal for long-distance patrols over the ocean. Since its adoption by Coastal Command its defensive armament has been greatly augmented. The versatile Bristol Beaufort (built in this country) is used for many duties, amongst them being that of torpedo-dropping: the torpedo, it might be added, is carried internally on this aircraft

# AIRCRAFT OF COASTAL COMMAND

The Seven Principal Types used for Bombing, Torpedo-dropping and Reconnaissance — *Drawings by Roland Davies*

**4 and 5. The American-built LIBERATOR, and the British-built SHORT SUNDERLAND, both used for patrols and bombing**

Both these aircraft are of the four-motor type, and both have a wide range of action, thus making them ideal for ocean patrols. In addition to bombing and patrol duties, both are used for the escort of ocean convoys




**6 and 7. THE CATALINA, built in the U.S. and possessed of an enormous range; and the British BEAUFORT, used for torpedo-carrying and mine-laying amongst many other duties**

**THE CAPTAIN OF A CRUISER ON THE COMPASS PLATFORM, the highest deck of the bridge structure:** Commander, Navigating Officer and Chief Yeoman of Signals are to be found here during an action; and from this point, dangers from the air and from under-water craft are spotted. Control of the wheel is also carried out from this lofty position, as detailed in the article below—*Drawing by F. D. Blake*

# WHEN A CRUISER GOES INTO ACTION

## How it is Handled and How it is Steered from the Compass Platform when Under Fire

*—Article by FRANCIS McMURTRIE, with special* Sphere *drawings and diagrams*

IN action a cruiser is controlled by her Captain from the compass platform, the name given to the highest deck of the bridge structure. There also will be found the Navigating Officer and the Chief Yeoman of Signals. It is the former's task to con the ship under the general direction of the Captain, who is also in direct communication by voice-pipe and telephone with the other principal specialists, the gunnery and torpedo officers.

To alter course, helm orders such as "Hard aport" or "Hard astarboard" are passed by voice-pipe from the navigator to the steering position below. Strict station-keeping, whereby each ship in a line preserves exactly the same distance between herself and the next ahead or astern, is not observed in action. Instead, what is known as loose station-keeping is substituted.

Orders for increasing or decreasing speed to a small extent take the form of putting on or taking off engine revolutions. Thus the order "Up five" or "Down five," signifying that this number of revolutions is to be added or subtracted, would be transmitted by voice-pipe to the steering position in the same way as helm orders. There the engine-revolution telegraph would be moved backward or forward as desired, the extent of the movement being displayed on a dial, as well as on a second dial in the engine-room. Each time the telegraph is moved a bell is rung, so that it cannot fail to be noticed.

In the case of large alterations of speed, the new number of revolutions would be transmitted—i.e., for an increase, 170 revolutions might be asked for when the engines had previously been doing, say, 120.

Under exceptional conditions, a cruiser in action may have to be zigzagged to avoid punishment from the enemy's salvos, but this is seldom resorted to, as it is apt to throw out the ship's own gunfire.

If the bridge is knocked out by a heavy hit, or all communications with the steering position below it are cut, there is always an emergency conning position, from which a reasonably good view can be obtained, somewhere on the upper deck, with an alternative steering position below. To this secondary position the captain and navigating officer would immediately proceed if they have not been killed or incapacitated. Otherwise, the commander (second-in-command of the cruiser) and assistant navigator would take over, or such other surviving officers as may be available.

Generally speaking, the longer a ship, the greater is her turning circle. Other things being equal, a smaller ship is bound to be handier, but of course her speed is likely to be reduced to a more serious extent by rough weather, which may also affect her gunnery to a greater degree.

**SEAMEN AT WORK ON THE RANGE-FINDER: These ratings have a "flat" of their own, usually just above the compass platform, which gives them a sufficiently elevated position for finding the range**

In a cruiser squadron it is the business of the flag officer commanding it—usually a Rear-Admiral—to place the ships in the positions in which they can fight to the best advantage. To assist him in working out the details he will have the co-operation of the squadron operations officer and the squadron navigating officer.

When going into action, every ship will be wearing white ensigns at the foremast-head, mainmasthead and gaff. When clearing for action the ensign staff is unshipped, so one cannot be flown there. It is a rule always to keep as many ensigns as possible flying, so that if one is shot away it is immediately replaced.

Communications between ships in action are transmitted either by flags, wireless, or signalling searchlights, which send out Morse signals by means of a shutter.

No better example of a cruiser action could be found than the Battle of the Plate, in which three cruisers defeated a much more heavily armed "pocket battleship." Their success was based on the fact that Commodore (now Rear-Admiral Sir Henry) Harwood had explained to his captains beforehand the tactics which he proposed to employ. His plan, which was duly carried into effect, was to engage the *Admiral Graf Spee* from two widely different angles. This forced the enemy either to "split" his main armament in order to engage both units simultaneously, or to leave one of the British units unengaged by his 11-in. guns.

At first the German ship divided her attentions between the *Exeter* to the westward and the *Ajax* and *Achilles* to the north-eastward, but, after some shifting about, ultimately concentrated on the *Exeter*, whose 8-in. gunfire was doing the enemy damage. This enabled the other two cruisers to close on the *Graf Spee* and hit her repeatedly with their 6-in. shells.

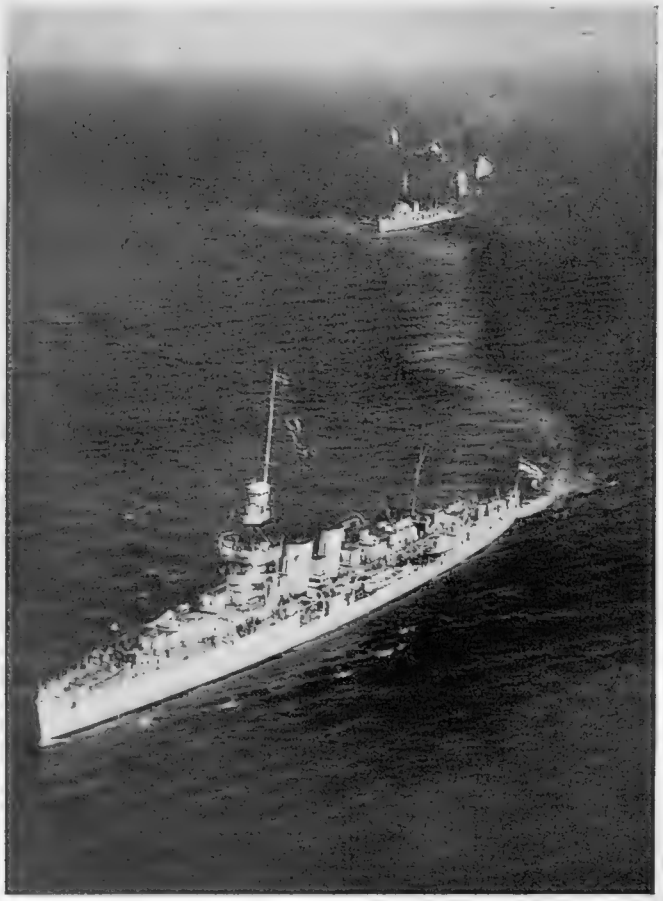
It will be recalled that a direct hit from an 11-in. shell wrecked the *Exeter's* bridge, killing or wounding everyone except the captain and two others, and destroying the communications with the wheelhouse. Though the ship was momentarily out of control, the alternative conning position took over almost at once, and the captain was soon able to make his way there and resume control of the cruiser.

In H.M.S. *Achilles*, splinters wounded the captain and chief yeoman of signals on the bridge, but luckily no important instrument was affected, and the efficiency of the ship was not impaired.

WHEN A CRUISER GOES INTO ACTION

# HANDLING AN 8,000-TON WARSHIP: How the Ship is Steered when Under Heavy Attack

DODGING dangers from the air and from under-water craft implies some very vigorous and prompt helm work on the part of the naval vessels so threatened. Destroyers, of course, are often flung round "on their heels" in order to avoid, or intercept, the enemy's pressing attacks: they may, in fact, complete the best part of a circle during such manœuvrings. Aircraft-carriers, too, despite their very much greater tonnage, have proved almost as handy as destroyers when taking evasive action: so nimble are they, in fact, that many times the enemy has laid claim to a great victory when what his airmen have seen is merely the big ships heeling right over under a sudden and vicious change of course! On a cruiser, however, there are fewer calls to perform such violent evolutions: nevertheless, during the recent battle of the Malta convoy, there was occasion for very vigorous helm work on the part of the protecting British cruisers, so it is reported. This is the subject of Mr. Montague Dawson's picture reproduced *on the right*. For these violent evolutions delicate instruments, working instantaneously, are combined with hydraulic and electrical power in order to fling 6,000 or 8,000 tons of metal off its course and compel it to take up a new bearing. (*See also following two pages*)



**A BRITISH CRUISER LEADS A DESTROYER FLOTILLA INTO ACTION: With plenty of helm work made apparent by the sinuous wakes of the warships**

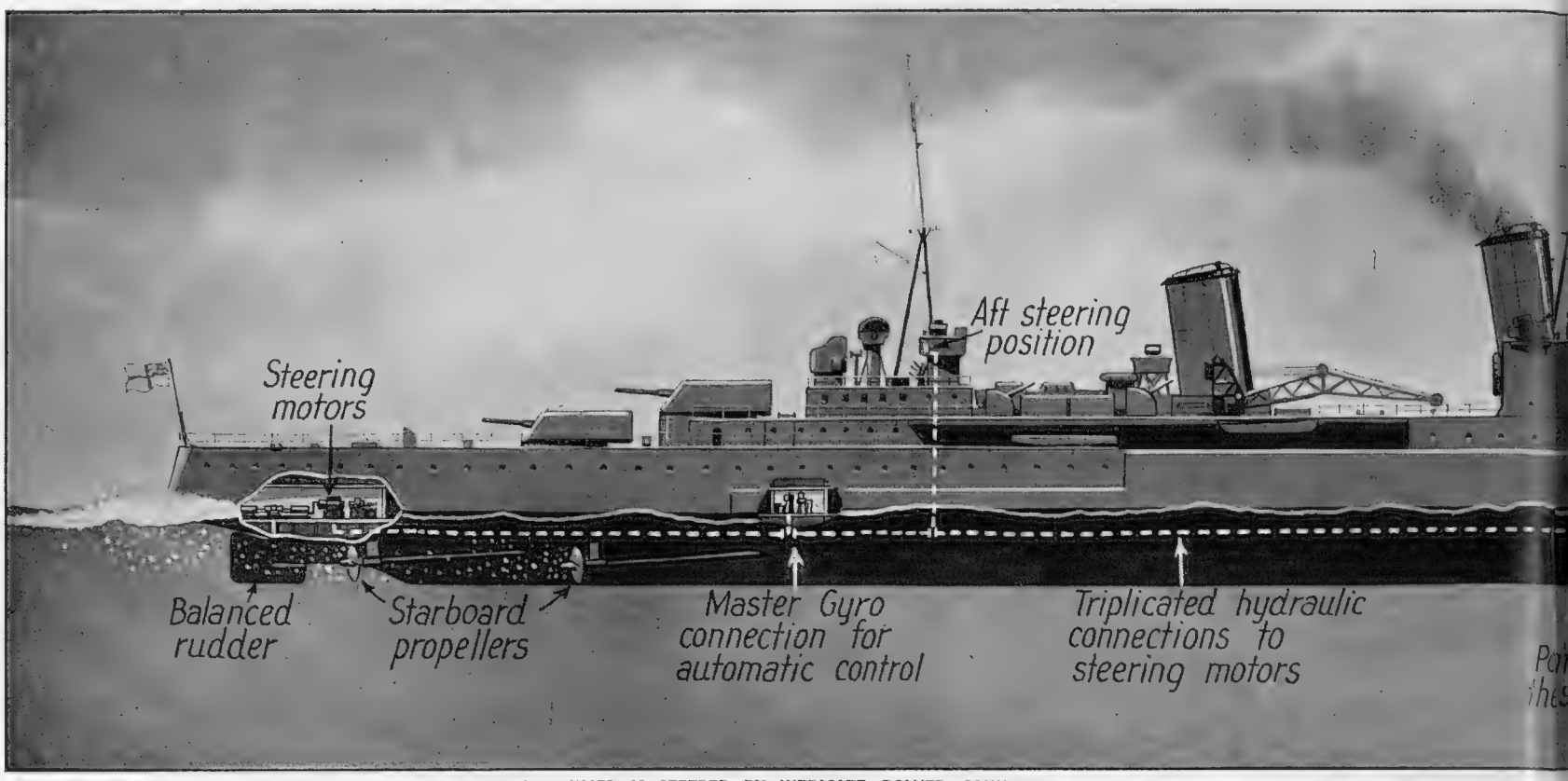
***On left*—ON THE BRIDGE OF AN AIRCRAFT-CARRIER: The anti-submarine look-out on duty high above the flight deck. Should he signal danger, avoiding action will at once be taken, and the navigating officer will have some hectic moments!**

***On right*—CRUISERS IN LINE-AHEAD FORMATION, showing the bulky and sturdy appearance of the bridge structure when seen from head-on**

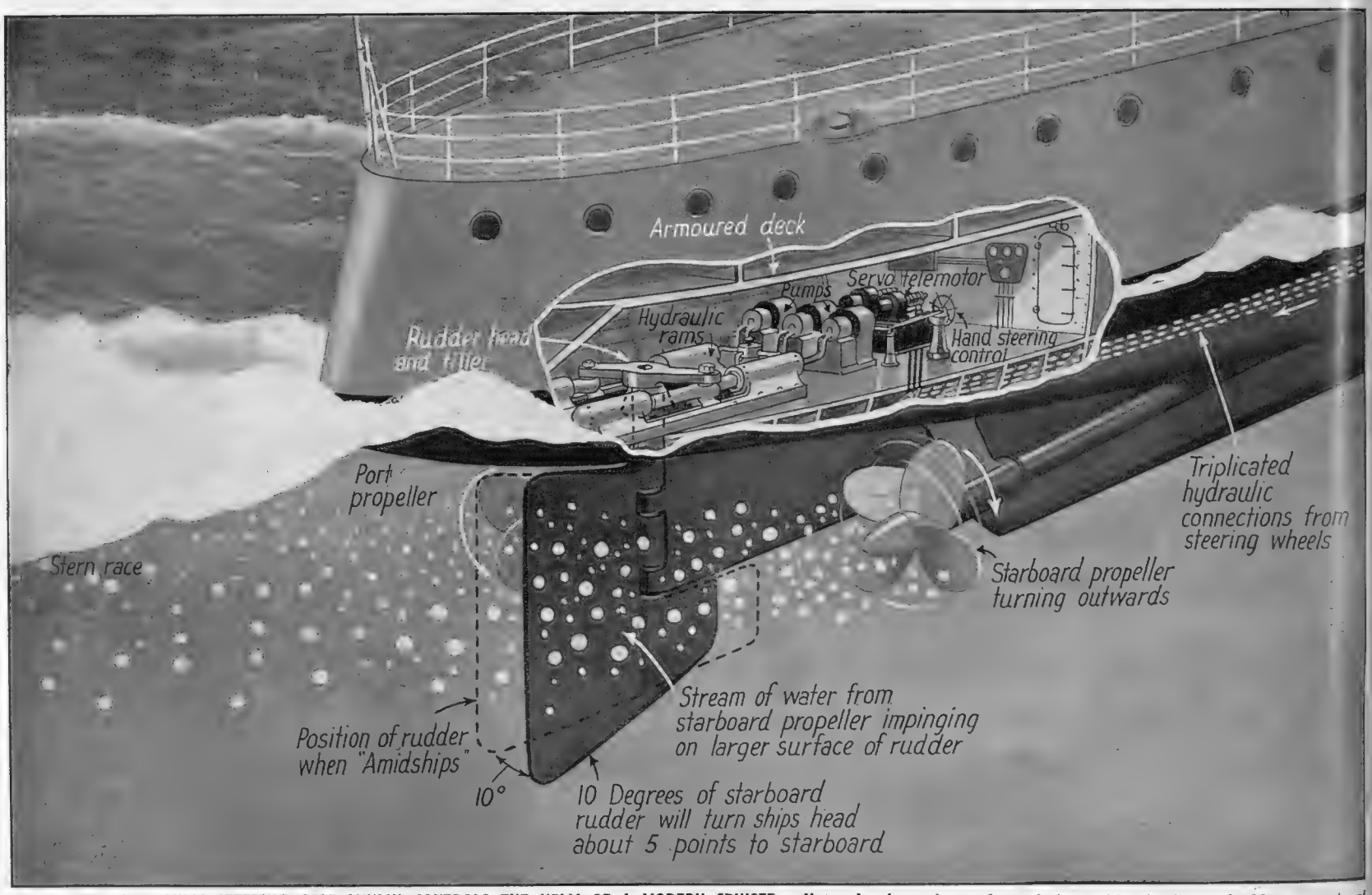
**DURING THE ATTACK ON THE MALTA CONVOY—TWO BRITISH CRUISERS DEMONSTRATE THEIR AMAZING AGILITY** under attack from enemy bombers: on the left is an 8,000-ton vessel of the York type, and on the right a 7,000-ton vessel of the Leander and Ajax class
*—Drawing by Montague Dawson*

*On left*—**A CRUISER GOING INTO ACTION,** and firing a salvo as she goes. Note the bow wave indicating her considerable speed

*On right*—**A BRITISH CRUISER OF THE LEANDER CLASS,** a vessel of some 7,000 tons. Bridge, gun turrets and aircraft are all prominent in this fine overhead view




**THE METHOD BY WHICH A 6,000- OR 8,000-TON BRITISH CRUISER IS STEERED BY INTRICATE POWER CONNECTIONS:** The hydraulic connections are triplicated and sometimes sextupled. The great vessel pivots on a point about a third of the way from the bow on receipt of orders from the compass platform on which the captain and navigating officer are usually stationed



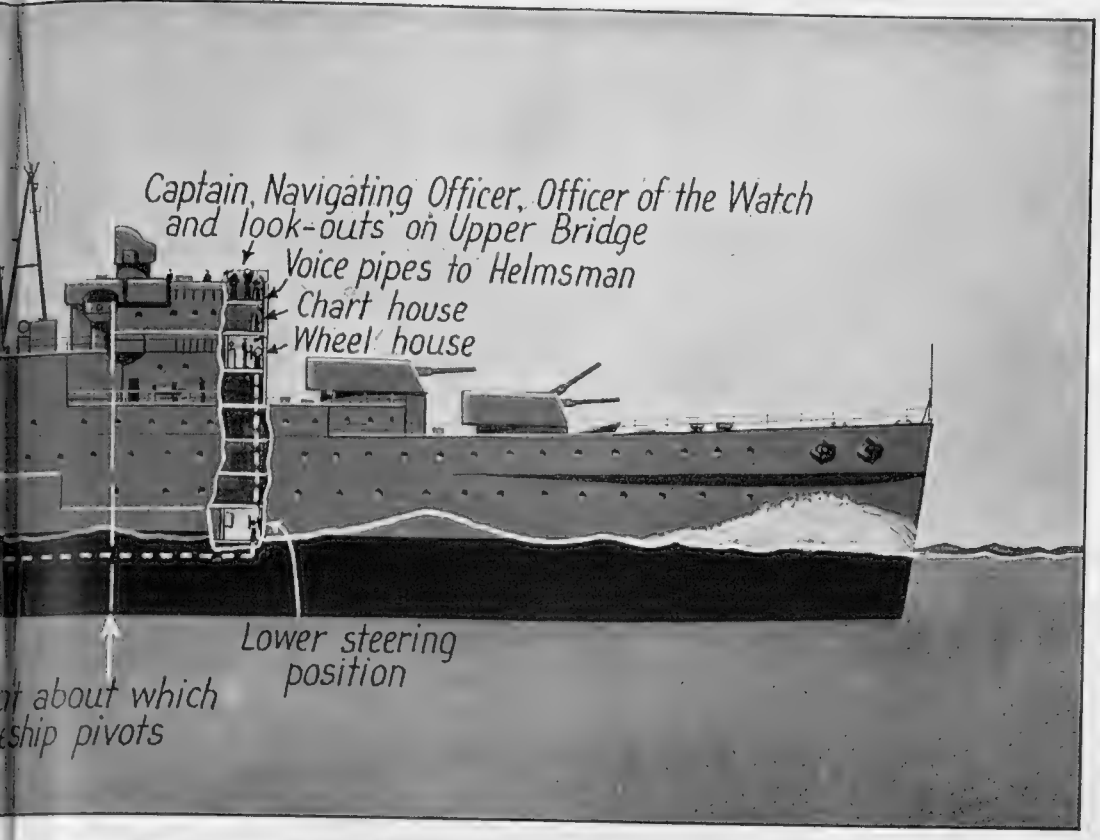

**THE ELECTRO-HYDRAULIC STEERING GEAR WHICH CONTROLS THE HELM OF A MODERN CRUISER.** Note also how the surface of the rudder is disposed—30 per cent. of its area being before the centre of axis—in order to help the movement and also to save power. Incidentally, the rudder is always below the stern of the vessel and never shows above the waterline

By a slight touch of the wheel the modern warship can be turned in a very short time. Pressure is conveyed almost instantaneously to the servo telemotor in the steering compartment; this immediately operates pumps which, in turn, move the pistons of the rams. Attached to the rams is the tiller fixed to the rudder-head, which can be moved up to 40 deg. to port or starboard. The action of the water from the screws impinges on the rudder and thus turns the ship. In the balanced type of rudder shown, 30 per cent. of its area is before the centre of axis; and thus, as the rudder is moved over, this forward portion—being on the other side—helps the movement and thus saves power. The rudder automatically comes back to the amidships position as soon as the vessel is set upon its new course

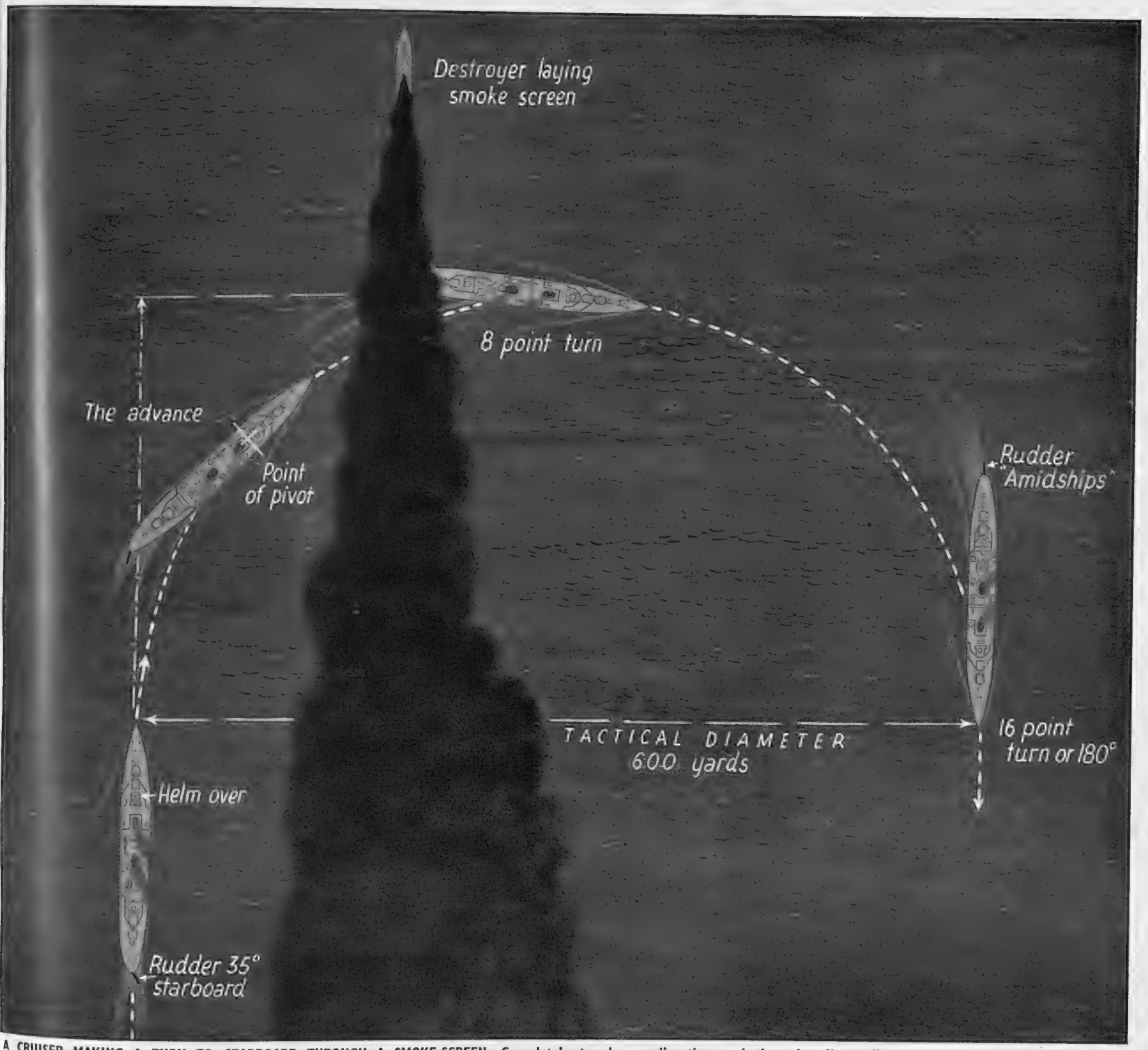
*On right*—In this evolution the ship describes a complete semi-circle—or, in other words, a 16-point turn—which brings her on to a course opposite to the one in which she was formerly proceeding. This is called her "technical diameter." The steering orders to the helmsman would be "Hard a-starboard" in an emergency, or "Starboard 35" normally. The ship swings round on her point of pivot which is about one-third of her length from the bows. The helm is put over to amidships before she reaches her tactical diameter to counteract the swing. Of course, less rudder angle means a greater tactical diameter. The above manœuvre is very impressive when a cruiser is doing, say, 30 knots as she disappears into the smoke-screen to dodge the enemy

# The STEERING of a MODERN CRUISER

*—Described and Illustrated by L. Ashwell Wood*




*On left*—The look-out men on the upper bridge have a clear view of the horizon. Any steering orders given by the captain or navigating officer are immediately transmitted by voice-pipes direct to the helmsman in the wheelhouse below who repeats back the desired course. The helmsman, incidentally, can only see ahead. Steering repeaters are on the upper bridge. Power is immediately transmitted to the steering gear, the connections being well protected and triplicated—sometimes sextupled. Should the wheelhouse be damaged, the ship is steered from the well-protected lower position, again by voice-pipes—or, if these are shot away, by a string of messengers. Other steering positions are shown. The gyro-controlled steering is used normally on long courses, being set to a pre-determined course which it maintains (much as does "George" in an aircraft). As a last resource there is a hand-controlled wheel in the steering compartment




**A CRUISER MAKING A TURN TO STARBOARD THROUGH A SMOKE-SCREEN—Completely to change direction and thus describe a "16-point turn," the cruiser describes a semi-circle which involves, in this case, a "tactical diameter" of 600 yards**

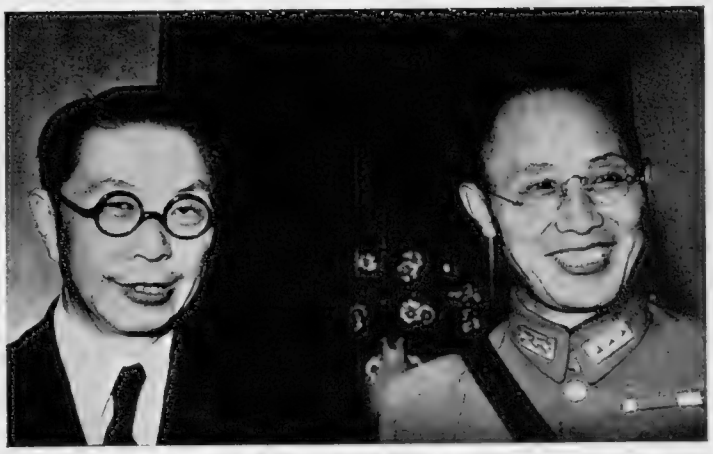
# The LEADERS of MODERN CHINA

*The Men who have Resisted the Japanese Armies During Five Years of Bitter Struggle*

PRIME MINISTER AND MINISTER OF FINANCE, Dr. H. H. Kung, whose headquarters are at Chungking and one of whose tasks is to finance the costly war against Japan

THE PRESIDENT, GENERAL CHIANG KAI-SHEK, with two important Americans: On the left is Colonel Claire L. Chennault, head of the American Volunteer Group of fighter-pilots who covered themselves with glory in the fighting in Burma: in the centre is Mr. Owen Lattimore, who was selected by President Roosevelt himself to be the Chinese Generalissimo's Economic Adviser in Chungking

THE FAMOUS "CHRISTIAN GENERAL": General Feng Yu-Hsieng, now an Army leader under Chiang Kai-shek

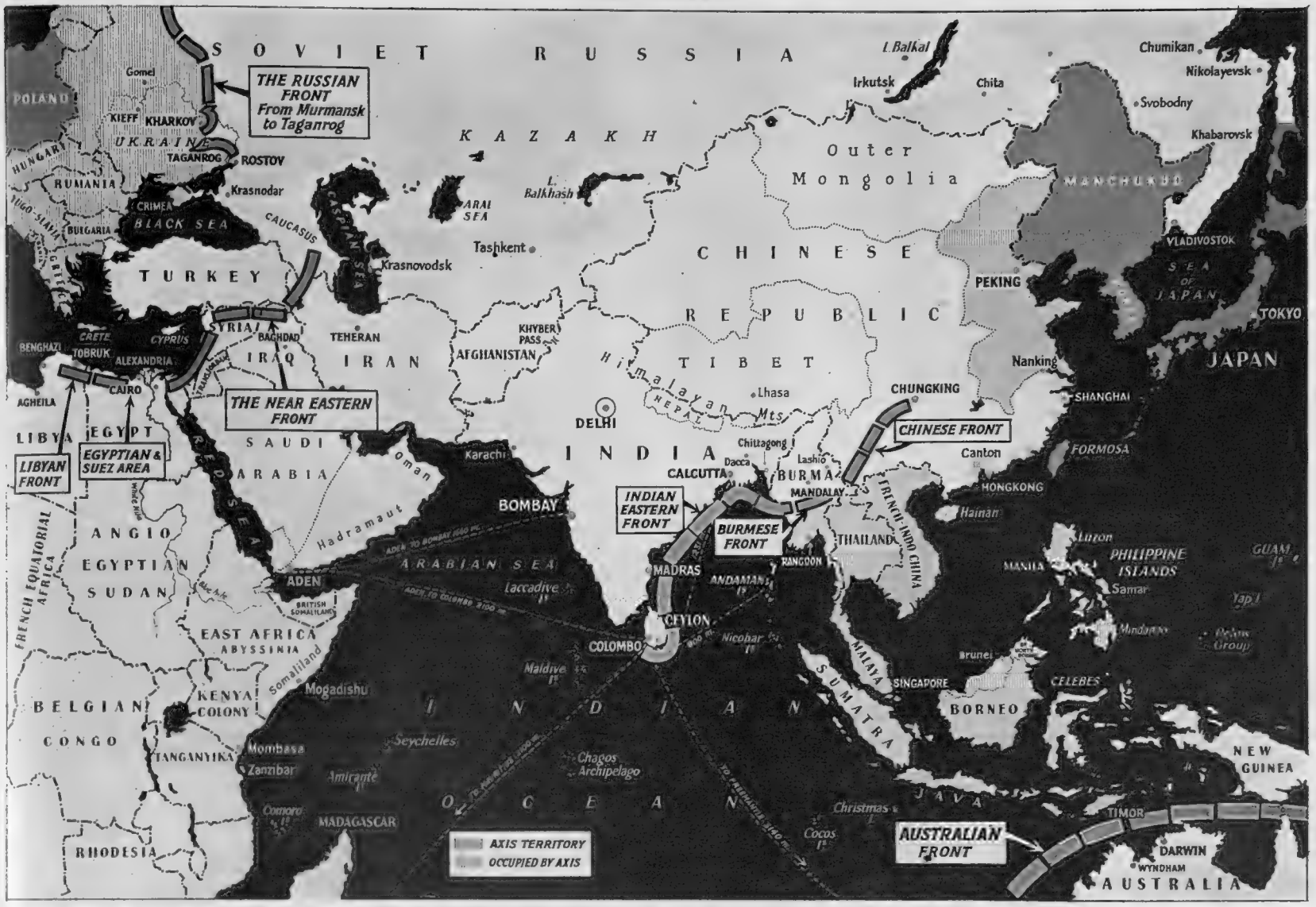


TWO LEADING FIGURES IN THE CHUNGKING GOVERNMENT: On the left Dr. Quo Tai-chi, Minister of Foreign Affairs since April 1941; and General Ho Ying-chin, War Minister

GENERAL HSU YUNG CHANG, Minister of Operations, indicating a zone of combat on a map in his office in Chungking

GENERAL PAI CHUNG HSI, one of the Chinese military leaders in the bitter fight against Japan

PEOPLE OF CHUNGKING stream out of caves dug into the side of the surrounding mountains after a Japanese air raid: For five years now China has been defending herself against the Japs. Chungking, the Nationalist capital, has been bombed so long and so consistently that it is easily the most battered capital in the world. Surrounding the city, however, are mountains, which have been excavated in such fashion as to provide shelter for the inhabitants; had it not been for this, casualties would have been fearsome!




**A WAR INVOLVING CONTINENTS: The battlefronts now stretch from China to the Mediterranean, with the great sub-continent of India under menace from both sides, and the Australian continent cut off from its north-western approaches—*A Special Sphere Map***

# THE SPRING OFFENSIVE, 1942

*Where will Hitler Launch His Next Big Blow? A Review of the Choices Open to the Enemy from the Arctic to the Tropics*

WHEN and where will Hitler attack during this month of April, the month hitherto so auspicious in his wartime calendar?

Military experts, studying the map of Europe, have suggested that Hitler might make a spectacular thrust at Northern Africa, taking his troops through an acquiescent Spain, capturing Gibraltar from the land, and overmastering Morocco, where the Vichy forces are weak and lacking the necessary munitions. All this to gain approach to Dakar and a foothold on the West African coast to harass our shipping. Perhaps the Vichy Government might be forced to agree to this, or Spain, by lavish promises, might occupy French Morocco, which has been inter-penetrated by Germans throughout the past years.

One battlefront will almost certainly be from Libya, where Rommel has been reinforced, in spite of the watching eyes of the British Navy. The talks which took place in Rome last February between Göring and Mussolini and Field-Marshal Kesselring, commander of the German Air Force in Italy, concerned "far-reaching plans in Africa." It is also said that Mussolini was urged to risk the Italian Navy in bold efforts, with the promise that he should have more U-boats to assist him and greater help from the *Luftwaffe*. Malta was to be reduced to submission in order to make the carrying of supplies to Tripoli a simpler task—the supplies being an absolute necessity if any advance from Libya is to be made.

Throughout all the rumours of troop movements, Turkey professes to remain calm and retains the hope that Hitler will not open up a fresh front by invading their country. But Hitler has up till now found his great successes against new foes unused to the fierce onslaught of the Nazi attack, and the prospect of a speedy capture of the Straits, with an entrance for the Italian ships into the Black Sea, would overcome any objection to adding to the number of his enemies. Up to the present moment Turkey is being treated as a trusted ally, and hopes seem to be entertained that she may be persuaded into forgetting her friendship with Britain, and by promises of regaining Syria and Iraq to lure her into granting permission for the passage of German troops.

In spite of Hitler's well-known desire to make a surprise attack somewhere, everything seems to point towards the Caucasus. The Germans have clung on to Taganrog, and to the Crimea, obviously with the plan of striking from these advanced positions. Though they have not succeeded in taking Sebastopol, and have lost the peninsula of Kertch, recaptured by the Russians at the end of last December, a special effort when the weather becomes suitable might gain them the desired advance. Once their objective was obtained, they would see Persia and Iraq opening up before them. It has not been unnoticed that Hitler, for months past, has been paying great attention to the Mufti and to Rashid Ali, the leader of the rebellion in Iraq, both of whom have been to Berlin. Propaganda has been busy among the Arabs promising freedom from British interference.

**GÖRING UP-TO-DATE: The over-size Marshal has been carrying out a tour of his air force—with an over-size in field-glasses! This German propaganda picture shows him in one of his more amiable poses**

In Russia itself, weather conditions with the thaw making rapid movement almost impossible in the northern and central regions, there seems little likelihood of immediate attack. A few weeks ago German troops were taking over positions, previously held by the Finns, on the Karelian Isthmus, with the object of closing in more firmly upon Leningrad from the north. Supplies were being moved up from the Baltic States while the frost lasted. There have been rumours that German troops had been massed at Danzig, Lubeck, Stolp, and on the island of Ruegen in the Baltic, while the Danish island of Zealand has also received several divisions of troops. Such concentration can scarcely have any concern with Russia—are they a menace to Sweden? The capture of the Swedish Navy would be a welcome addition to the fighting power of the reduced German Navy.

What are the Japanese plans for the future before the monsoon period at the end of May? If they overrun Burma, will they try to enter China by the Burma Road, and endeavour to finish off the "Chinese incident" from the back door? Or will the lure of India and the vast prestige of its possible conquest attract them forcibly across the Bay of Bengal? Already Ceylon has had a serious air attack, conducted it is thought from aircraft-carriers. General Wavell has indicated that India is to be defended by mobile forces situated at strategical keypoints for attack wherever needed. The rivers are being protected by naval forces. All work is being speeded up on aerodromes and defence works.

As regards any invasion of Australia, it is hard to decide where the Japanese would make a landing. The northern portion of the continent presents insuperable difficulties, with a sandy, waterless desert stretching over the greater part. The great ports on the east might prove difficult, and it is hard to see how the Japs could hold anything so vast at the moment. They might seize aerodromes and try to bomb the cities into submission. But New Guinea is proving a tougher obstacle than was expected, and the Royal Australian Air Force is putting up a fine defence, and is also attacking with great vigour and success.

B. H.

Drawing by Percy Home

**1. DELAYING THE ADVANCE OF THE JAPANESE TOWARDS UPPER BURMA: The scene of the final stage of the fighting around the railhead of Prome**

The three bird's-eye views given here deal with the delaying actions of the British forces on the main road leading northward from Rangoon. When the month opened, the British force had become tangled up with Japanese opposition in the district of Shwedaung, ten miles south of Prome. The road northwards was blocked by Japanese, separating the British force from Indian troops based on Prome. The Indian troops attacked as the Gloucesters, West Yorks, Cameronians and Duke of Wellingtons burst through and reached Prome, a busy Burmese provincial town, with certain Western amenities. Japanese troops were also advancing up the western shore by way of Padaung

## The INDIA-BURMA PASSES

### Possible Routes of Supply for Our Fighting Forces

THE most urgent problem for the High Command in India is how to maintain supply contact with the forces in Burma, which may not be able to hold the Japanese in the south.

Four possible passes through the continuous mountain chain which divides India from Burma were surveyed before the war with a view to the construction of a railway. This mountain chain begins with the Patkoi heights in the north, at the edge of the Tibetan plateau, then continues with the Lushai Hills, the middle of the barrier, and ends with the Arakan Yoma, coming right down to the sea.

So the first pass surveyed was through the Patkois, and the explorers (they were almost that) led mules away from Sadiya in Assam, the end of the Assam railway from Calcutta, and followed what is known as the Hukong Valley down to Mogaung in Burma, which is only 30 miles away from Myitkyina, the terminus of the railway from Mandalay.

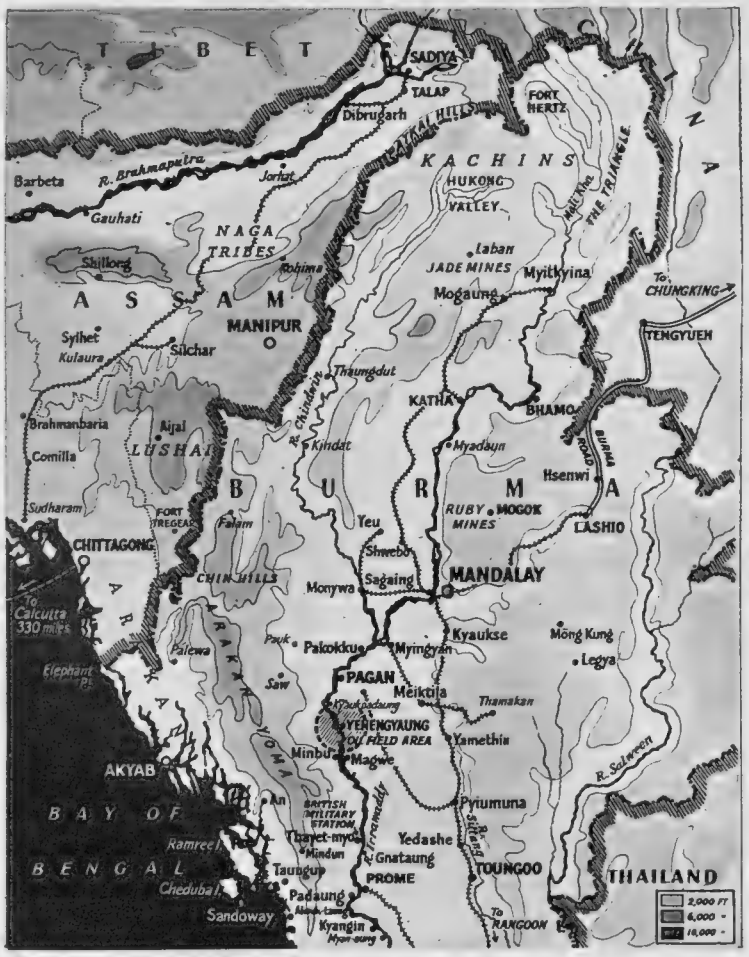
Next the railway people had a look at the Manipur Range, and reported more favourably this time. They travelled from Imphal, the capital of Manipur, after reaching that dusty, exotic town easily along a good motor road from Assam and the railway. Then they struck across the mountains by a mule-track 80 miles to the Chindwin River in Burma. The Chindwin connects with the Irrawaddy just below Mandalay.

Most attention was given, however, to the southernmost mountains, those Arakan Yoma; and it does seem from the direction of the Japanese thrusts that we'll have to think mainly in terms of those also. Now these Arakans not only end the mountain barrier between India and Burma; they also neatly cut off the Arakan province from the rest of Burma, running as they do in a kind of wall down the west coast, enclosing Arakan between that wall and the sea.

There were two possible routes through them. The first runs from the small port of An, on the coast below Akyab, in the form of a rough track over the 5,000-ft. An Pass, then down to Minbu on the Irrawaddy, under 100 miles. The second—no longer practicable, as it is now in enemy hands—starts from Taungup, lower down the coast, and is actually a road, which mounts only 2,000 ft., to drop down at Padaung opposite the railway town of Prome on the Irrawaddy. One hundred miles long again, this route could carry an army in the dry season. The road, with gradients varying from 1 in 20 to 1 in 8, had some recent reconditioning.

The Japanese are in control both of Taungup and Prome, however; and it is being increasingly thought their object may be to take the whole province of Arakan as soon as possible for a later descent on India. Roads between Arakan and India are another subject, but it may be said here that although we have not bothered to open routes in recent times, a fairly passable track does run from Akyab up the coast to Chittagong and India, used by coolies a lot.

D. C.




**MANDALAY TO MANIPUR? The Japanese thrust up the centre of Burma may make a retreat through the hills necessary. (*See* notes on left)**

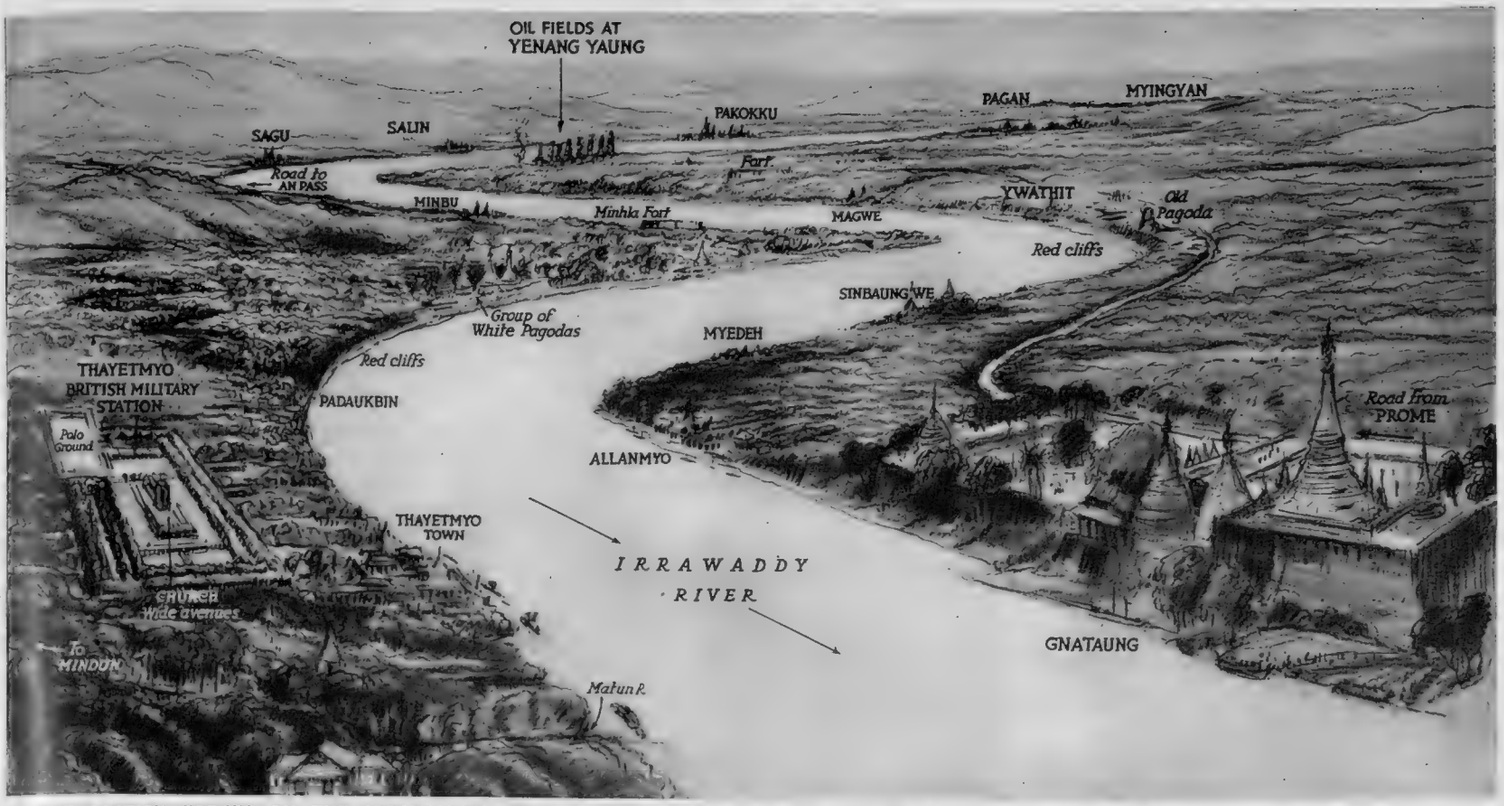
## The JAPANESE THRUST on the IRRAWADDY

THE Japanese advance northward from Rangoon, which has been taking place in the form of two columns, one on the left and the other on the right bank of the river, has centred attention on this mighty, broad-bosomed stream, which flows from the easternmost Himalayas out to sea through numerous mouths.

The Padaung of to-day clusters between the hills and the river edge. On the opposite bank, where one Japanese column has been advancing through Paung-de, on the main road from Rangoon, lies the pleasantly-placed town of Prome, with its pagodas set among avenues of trees and red-roofed European houses. It boasts a modern club and other amenities of life. The main road between its white railings runs parallel with the river. A great golden pagoda on a platform of some 12,000 square feet dominates the place—its chapels are crowded with uncounted figures of Buddha.

Beyond Prome, the river narrows between bluffs, the western shore being distinguished by two giant gryphons which stare down at the moving flood. These giant figures form part of the pagoda enclosures of Kama, a typical Irrawaddy townlet which has its pagoda-spires and its dwelling-houses perched on wooden columns in the Burmese fashion. A country bordering the river here begins to show some open glades, a relief after the mile upon mile of unbroken forest. Palo nestles on the eastern bank before we reach Allanmyo, named after Major Grant Allan, who marked out the old frontiers of Upper and Lower Burma in 1853. On the left bank is the British military station of Thayetmyo, which is more fully dealt with in the second view given here.

*Below*—**TYPICAL BURMESE RIVER SCENES: The wooded banks of the River Irrawaddy, with innumerable pagodas on the shore and rafts of teak-logs in the stream**




**2. THE BRITISH FORCES ON THE IRRAWADDY: THE POSITION AT GNATAUNG, opposite the British military station of Thayetmyo on the western bank, on which the Japs are also advancing**—*Drawing by Percy Home*

After occasional contacts with the enemy, the British force moved northwards, leaving the jungle country for more open territory with occasional glades and park-like districts. More pagodas were passed at Gnataung, some very old, in the area south of Ywathti. To the north lay the oilfields at Yenang Yaung, a probable objective of the Japanese Command, for the oil is of excellent quality and accessible from the river edge. The Japanese forces on the west bank were approaching Thayetmyo, a British military station, with all the conventional features of such a station. It lies a little way in from the landing place at Thayetmyo town on the riverside. There is a conspicuous row of white pagodas a little further north and remains of Burmese forts on both sides of the river. The track leading to the An Pass into India starts from Minbu

Thayetmyo, at which the river steamer will pull in on the western bank, is a place of modern origin. It grew up in the middle of last century as a military station. To-day it exhibits a mixture of Burmese buildings with brick dwellings, offices, and court-houses of a severely Western character, but on leaving the riverside townlet, with its mainly Indian population, the scene changes. The military settlement of Thayetmyo is a place of wide and splendid avenues, with a fortress, church, racecourse and polo ground. Some miles up the stream lies Mindou, a place of governmental significance. It is a district of singular beauty. Proceeding up the great stream, the banks are dotted with villages and small towns. At Malun the hill is crowned with pagodas reached up flights of white stairs. Close by stands the great brick fort of Nimbla, where the Burmese Army made its only attempt to stop the British advance in 1885. On the opposite bank is another fortress, largely concealed underground; it was constructed by Italian engineers for the Burmese King, but its planning was in vain, for no resistance was offered at this point.

The extraordinary character of the Irrawaddy, the great pagoda temple-lined stream which flows through the length of Burma, culminates at Pagan, an ancient city site on the east bank between Prome and Mandalay. Here, on a level plateau, with steep cliffs towards the river, one sees at once the remains of Burma's greatest capital and the evidence of the influx of Buddhism into Burma when the influence of that faith waned in India, the land of its birth.

On approaching this fascinating city site from the south, the illusion of some thronged faerie city of spires and domes is created on the mind. Gleaming white pagodas of varying curves and the darker masses of teak-built monasteries break the skyline. It is, however, only an illusion. Nearly all the great structures of Pagan are deserted. From an architectural standpoint, Pagan is unique in Burma. Most of the buildings exhibit a dignity and restraint which place them in a class apart.

**3. THE NORTH-BOUND ROAD FROM PROME PASSES ONE OF THE WONDERS OF THE WHOLE INDO-CHINA AREA: This is the ancient city of Pagan, stuffed with huge pagodas and temples**—*Drawing by Percy Home*

The road from Prome to Mandalay, on the east bank of the Irrawaddy, passes the site of the greatest of ancient cities in Burma. It is remarkable not only as a proof of the great influence of the original invasion of the Buddhist faith into Burma, but to all students of the architecture of the East these pagodas and temples at Pagan stand out as a high-water mark of architectural effort. Indian influence is evident in the massive, broad treatment as well as in the detail of ornament. There are gateways which subtly suggest a lotus or other flower springing from the ground. The more recent wooden structures which appear here and at other points along the river have not the lasting qualities of these centuries-old structures

# THE R.A.F. AT WORK

**PREPARING FOR A RAID: STIRLING BOMBERS OF THE R.A.F. being serviced and bombed-up ready for a raid on enemy territory. These huge aircraft are now carrying, each night, a terrific load of bombs to Germany and the Occupied areas**

The "heavy-weights" are now getting into their stride after the enforced lull of the winter: as Sir Archibald Sinclair promised some few weeks back, Stirlings and Halifaxes and others of the big boys are now carrying each night a terrific bomb-load to the enemy, and the drone of British aircraft is filling the German sky. Eight tons is the load which each of these big Stirlings carries on operational flights

**ONE OF THE LONELY JOBS OF THE R.A.F.: The rear-gunner of a Stirling, in his power-operated turret, ready for action**

Ready to spot and destroy enemy fighters at the tail of the big four-engined bomber, the rear-gunner's job is a lonely and monotonous one for long hours at a stretch. His excitement comes only when an attacking Messerschmitt ranges up behind to attack the bomber: then the action becomes very hectic, for a few short and sharp moments!

**READY FOR A BLITZ ON ENEMY SHIPPING, with the "magic eye" of the Hurricane adjusted to record the result:** Before the squadron leaves for a sweep over the sea in search of enemy supply ships and E-boats, this wonderful little movie-camera has to be adjusted. It will then synchronise with the cannon guns and record the hits scored against the enemy. The public has already become familiar with films of Nazi planes disintegrating in mid-air and ships being shot up: they have been secured by means of the little gadget shown here. It is fitted to a Hurricane of a night-fighter squadron commanded by a New Zealander

***On right*—WHAT 'S WRONG WITH THIS PICTURE?**

The answer is that, although the aircraft is German, it bears the markings of the R.A.F. It is a Junkers 88, captured almost intact over this country, repaired and re-serviced: it is now being used for instructional purposes here. The "88" is the latest type of high-performance aircraft produced by the Junkers Company, and it is somewhat tricky to fly. For instance, it cannot be landed with its bombs still aboard, neither must its fuselage tank be full: bombs must be dropped and fuel jettisoned! The rudder, too, is stated to be ineffective below 111 miles per hour. If one engine should fail in flight, the only way to maintain height on the other engine is to jettison everything at once!

**THE CHIEFS OF THE R.A.F. COASTAL COMMAND, with the Commander-in-Chief, assembled for a Conference at Headquarters**

Air officers from scattered Headquarters of Coastal Command Groups (which extend from Gibraltar to Iceland) recently met at a Conference with their Commander-in-Chief, Air Chief-Marshal Sir Philip Joubert, at Coastal Command Headquarters. The Command's aircraft now patrol 500,000 square miles of the Atlantic, enemy-occupied coasts from North Cape in Norway to the Bay of Biscay, and the Western Mediterranean. Since the beginning of the war they have flown 46,000,000 miles, attacked well over 300 U-boats, and made more than 30,000 separate flights on shipping escort duties. In this picture, from left to right, are seen the following: Air Vice-Marshal G. B. A. Baker, C.B., M.C.; Air Commodore W. H. Primrose, C.B.E., D.S.O., D.F.C., A.F.C.; Air Vice-Marshal J. M. Robb, C.B., D.S.O., D.F.C., A.F.C.; Air Vice-Marshal A. Durst..., A.F.C.; Air Commodore G. P. Simpson, C.B.E., M.C.; Air Chief-Marshal Sir P...ip Joubert, K.C.B., C.M.G., D.S.O.; Air Vice-Marshal G. R. Bromet, C.B.E., D.S.O.; Air Commodore I. T. Lloyd, C.B.E.; and Air Commodore H. G. Smart, C.B.E., D.F.C., A.F.C.

**THE CREW OF A GERMAN NIGHT RAIDER SHOT DOWN OVER THE SUEZ CANAL:** In the early morning of March 3, R.A.F. night fighters shot down an enemy raider in the Suez Canal area. The crew eventually baled out and landed in a rubber dinghy on the North African shore, where they were taken prisoner. The aircraft was a Heinkel, and here is its crew after capture

**COASTAL COMMAND AIRCRAFT AT GIBRALTAR ready to "search and strike":** From the shadow of the Rock giant Sunderlands and Catalinas of R.A.F. Coastal Command set out to search far and wide over the Atlantic and Mediterranean for lurking U-boats. Here is a "kit inspection" of a Catalina before it goes off on patrol

*Above*—**THREE JAPANESE AIRMEN shot down and captured during an air raid on Manila.** *On left*—**AN AMERICAN-BUILT FAIRCHILD AMPHIBIAN used by the R.A.F. for Air-Sea Rescue work in the Middle East**

# BOOM IN THE THEATRE

*Facts and Figures Concerning the London Stage, which has Performed a Wonderful "Come-back" During Recent Months*

By CHARLES GRAVES

IF you look down the Entertainments Guide in any London newspaper you will find that very few familiar names of theatres are missing. These include, however, the Shaftesbury and the Queen's, both of which were "blitzed," together with the Holborn Empire, the Stratford Empire and the East Ham Palace. In the provinces, one theatre in Coventry, two in Birmingham, one in Liverpool, and another in Manchester have also been put out of action. The cinemas have been much worse hit, relatively. Of the 5,280 in Great Britain, over 200 have been destroyed. The Gaiety and Lyceum were out of commission before the war, so they do not count as war casualties.

The career of the live theatre in this war has been chequered. In September 1939 all the theatres were closed by law in London, but permission to reopen was granted by the end of November. In the meantime, all kinds of West End shows and West End stars took to the road, and Blackpool, Manchester and Liverpool, for example, had a high old time seeing entertainments which they would never have seen normally.

It was George Black who took the plunge and was the first to reopen big theatres in the winter of 1939—the Hippodrome and the Palladium. But in view of the threat of the "blitz" (which was not to materialise for many months), the co-operative system of working was introduced. Artists shared in the profits in various ways. They received either a percentage of the gross receipts or a flat salary with a sliding scale of increase above a certain figure, or took shares in a kind of syndicate based somewhat on the *tronc* system among waiters. George Black's enterprise paid hand-over-fist, and other managements followed him.

One result of this co-operative system was that producers were able to provide whole teams of stars which in peacetime they could never have risked paying. Look at *Shephard's Pie*, and now *Fun and Games*, with Sydney Howard, Arthur Riscoe, Richard Hearne and Vera Pearce. Or again, Leslie Henson, Stanley Holloway, Cyril Ritchard, Pat Burke and Binnie Hale in *Up and Doing*.

This co-operative system was very profitable to several stars. I know of comedians who would normally have been earning £200 a week who found themselves earning £350 to £400 a week. And this system still continues, however much the managements try to break it down. The artists, very properly, consider that as they took a gamble during the "blitz," they are entitled to a "break" in the good times. And there is no doubt that times are very good in the theatre. Gross earnings are much higher than ever before, both in London and the provinces, and since June of last year real failures have been so few that I cannot think of a single musical show which has failed to ring the bell. Mind you, the managements all realise that there is no such thing as a West End audience any more.

When the first shows appeared after the ban had been lifted, the managements went in for cheap productions with profile scenery. But when the boom really began in July 1941, managements regained confidence and put on expensive shows. This meant, on the face of it, that there would be less money for the artists. But, as I have said, the managements failed to persuade the artists to accept pre-war flat salaries. This applies, at least, to most artists earning £75 a week and upwards.

But what about dressing the shows? The answer is that if a manager wishes to put one on, he asks for coupons from the Committee set up by the managers themselves with the consent of the Board of Trade. This Committee advises the Board of Trade how many coupons the manager is entitled to, and so far the Board of Trade has accepted all the recommendations. The shortage of coupons does not necessarily make for nudity. Rather, it makes for carefulness on the part of the manager.

The cost of everything has, of course, gone up. Not only have costumes risen in price, but the salary of stage hands, technicians, electricians (when they can be secured) have risen 50 per cent. In this connection it is a permanent source of amazement to me that any first-class big-scale show ever sees the light of day. The wages of chorus-girls, which before the war were £3 10s. a week, are now, generally speaking, £5. Small-part artists' salaries have risen from £8 to £12 and from £10 to £15 a week.

To prevent the complete disruption of the show business, all the established chorus-girls (who have been in shows for a minimum of the last six months) had their call-up deferred to the end of last month, pending conversations between the theatre industry and the Ministry of Labour. As I write, there is a project that a percentage of them should get further deferment on condition that they devote part of their time to entertaining the Forces.

Now about the theatres themselves. During the "blitz" they were easily obtainable, and the owners rented them for next to nothing. To-day, theatres can scarcely be obtained for love or money. Take the case of the "X" Theatre. Three managements have been bidding for it tooth and nail—nearly coming to blows and lawsuits. As a result, a famous comedy team will again be seen in the West End. Theatres, incidentally, are always let on a percentage basis. This is anything from 12 per cent. to 20 per cent. of the gross receipts, dependent on the individual theatre. In the depressed times of last year an owner was glad to get £200 a week. To-day he is more likely to make £800 a week. What is more, he has retained the coakroom, bar, and sale of programmes revenue, all of which have increased in value considerably. As is generally known, the opening hours of individual theatres are flexible and affected by black-out. But every theatre management has to the receive individual police permission for the hours, by which it has to abide. The police, very properly, insist on theatre times being staggered, so that at no one moment Piccadilly Circus can be crammed with people all leaving different theatres simultaneously at 11 p.m. Most of the London theatres now start their last performance between 6 p.m. and 6.30 p.m. The last to open (except for the gallant little Windmill, which alone of all the theatres played right through the "blitz") is the Ambassadors, which starts at 7.30 p.m.

In the provinces the boom in the theatre has continued even after the return to normal in London, and No. 2 towns like Ipswich, Norwich, Middlesbrough and Scunthorpe are playing to No. 1 town receipts. It must be observed, however, that capacity business is only being done when a real attraction (probably some favourite radio artist) is presented.

In the two black-out winters it was found that live entertainment was doing much better than the cinemas. Thoughtful people deduce from this that, psychologically, the public preferred a light, bright atmosphere, and did not want to go from the black-out to the semi-black-out (of a cinema) and back again into the black-out. As a result, numbers of cinemas have started variety again—notably the Regal.

In conclusion, when representatives of the theatre industry went to see Mr. Ernest Bevin recently, he said that it had been an absolute "Godsend" that the theatre had remained open during the "blitz" and the two black-out winters. According to him, the effect on the morale of the populace might have been otherwise serious: while the latest scheme to send every West End show round the garrison theatres and factories for six weeks after the termination of their West End run is further proof of the often maligned patriotism of the theatrical world.

**YOUR WASTE PAPER ON ACTIVE SERVICE:** Every ship of the Royal Navy is "de ammunitioned" when it comes back to harbour for a refit, and all cordite charges are put into cardboard cases, sent ashore and stored until the ship has completed her stay in dry dock. This picture was taken by a British Newsreel photographer aboard the battle-cruiser *Renown*: it shows the cardboard containers (made, of course, from *your* waste paper) being fitted on to the cordite charges

## THE SHAFTESBURY HOMES AND "ARETHUSA" TRAINING SHIP

NINETY-NINE years ago, on St. George's Day, this great Society was born. From its small beginning it has grown to its present widely-known activities, never departing from its early traditions. Thousands of children have been succoured from homes where the dragon of drink, neglect, poverty and other vice abounded; others where the angel of death had removed parents. During the last year or so the war dragon has added to its usual deadly work by robbing children of hitherto good homes through destruction by fire or other bombs. This Society has done and is still doing its utmost for the children. Was it your custom to buy red roses on St. George's Day in peacetime? Then please send to this Society what you would have spent, and thus give roses to some little child's cheeks again. The Headquarters address is 164, Shaftesbury Avenue, London, W.C.2.

*The fact that goods made of raw materials in short supply owing to war conditions are advertised in this publication should not be taken as an indication that they are necessarily available for export*

## THE WORLD OF BOOKS

By VERNON FANE

BEING at the height of what, in normal times, would be the spring publishing season, the accumulation of new books is rather larger than usual. Space, however, is as restricted as ever, and publishers, as well as newspapers and periodicals, have had yet another sharp reminder that paper is in short supply. On the other hand, the booksellers report brisk business and rising demand for every kind of book.

This week I will run briefly over as many of the more recently published titles as my space will permit. First, I would like to call attention to **ALLIES IN ARMS** (Allen and Unwin. 21s.). This is a beautifully produced pictorial survey of the British military and Air Commands, as well as of those of the Allied forces, edited by Mr. Owen Rutter, with biographical sketches by Mr. Donald Cowie and an introduction by Mr. Ernest Raymond. There are, in addition, 120 pages of remarkable photographs, showing the various Forces in action on land, sea and air. It is a magnificent and valuable production.

Outstanding among the biographies is **CHURCHILL: THE MAKING OF A HERO**, by Esmé Wingfield-Stratford (Gollancz. 10s. 6d.). The author puts some fine dramatic zeal into the telling of the life-story of his hero, and into the development of his theme, which is that the whole of the Prime Minister's versatile and adventurous career was preparing him for his supreme mission. Dr. Wingfield-Stratford achieves a realistic portrait of an almost unique biographical subject.

**JOSEF STALIN: MAN OF STEEL**, by David M. Cole (Rich and Cowan. 6s.), is a biographical portrait of another hero, but of very different calibre. The publishers describe Stalin as the most powerful individual in the modern world, and although this biography shows some signs of structural haste, the familiar facts are competently marshalled and the Man of Steel emerges in recognisable portraiture.

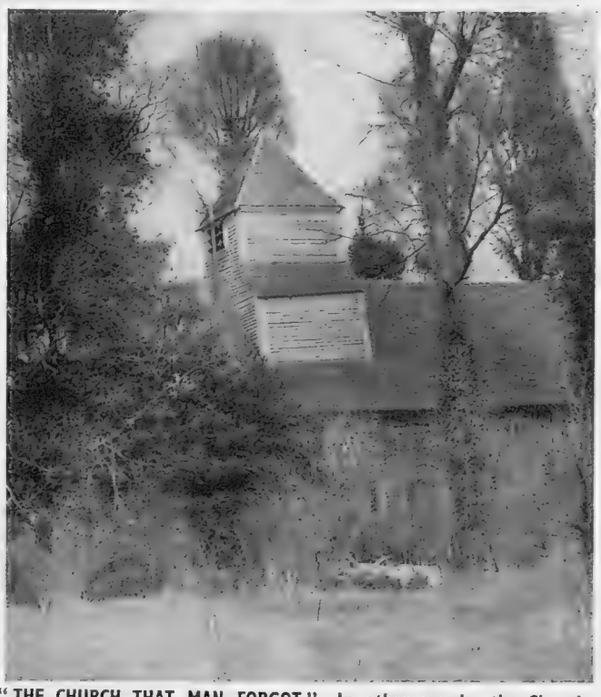
The Common Sergeant, Mr. Cecil Whitley, K.C., contributes an autobiographical record of his forty-three years at the Bar in **BRIEF LIFE** (Macmillan. 10s. 6d.). He adds a few lively accounts of some sensational cases, as well as two chapters of legal stories, some new and some old. There is also a chapter on corporal punishment which is well worth reprinting from the original report in which it first appeared. There is a good deal in this book which should be of encouragement and an inspiration to young barristers.

A lively book of racing reminiscences, full of good stories and nostalgic illustrations, is **GOOD DAYS**, by Meyrick Good (Hutchinson. 12s. 6d.). Mr. Good is known to millions as the "Man on the Spot." The racing world has always attracted odd and fascinating characters, and the author has known them all. Incidentally, he pays a very fine tribute to his old friend Edgar Wallace, to whom Lord Derby refers in a charming foreword.

(Continued on page 92)

# AFTERMATH of the RAIDS

**ST. PAUL'S STANDS, SERENE AND STEADFAST, AMIDST THE RUINS OF THE "BLITZ":** As more and more raid debris is cleared away from the badly "blitzed" area around St. Paul's, Londoners are getting finer and still finer views of their great Cathedral, the very sight of which stands for London. A picture like the above shows what opportunities for revised town-planning are going to be presented after the war. It has been suggested that the area around St. Paul's should be completely clear of buildings, with pleasant gardens leading up from the river giving clear views of the edifice from all sides. Will such an opportunity be seized, or is the value of land in this crowded part of the City too great for it to be spared in this way? The magnificent picture above was taken from the corner of Cannon Street and Queen Victoria Street, and shows the Cathedral with all its graceful mass visible to the beholder. Some effort should surely be made after the war to preserve such a wonderful view as this for the benefit of posterity!



**"THE CHURCH THAT MAN FORGOT"—In other words, the Church of St. Mary Magdalene at Boveney, near Windsor:** It is in a state of disrepair, with the organ-pipes broken, the windows smashed and the floor littered with rubbish. The Rev. D. Wingate, priest-in-charge, said that the church was not used except on St. Mary Magdalene's Day, and he had found it impossible to keep the vandals out. "They use it as a bathing hut or picnic place in the summer," he said. "I have even had to turn out a courting couple"

**THE REPAIR OF VALUABLE POTTERY BROKEN DURING AIR RAIDS:** The high price of crockery and the difficulty in obtaining replacements has forced many people to send their breakages for repair. An expert in this type of work is Mr. Hall, who has been at it for forty-five years in his London shop

**CHOOSING THE WORKS OF ART FOR EXHIBITION AT THE ROYAL ACADEMY SUMMER SHOW OF 1942: The Selection Committee at work**

War or no war, the great art event of the year for thousands of artists in England is the Summer Exhibition of the Royal Academy at Burlington House. It will be held as usual within a very few days now; and here the Selection Committee of Royal Academicians and Associates are seen at work selecting the canvases which the Hanging Committee will later be asked to deal with. Reading from left to right are the following—Mr. W. R. M. Lamb (Secretary); Mr. G. F. Kelly, R.A.; Mr. E. Vincent Harris, A.R.A.; Mr. L. Campbell Taylor, R.A.; Mr. S. Anderson, R.A.; Mr. W. Russell Flint, R.A.; Sir Edwin Lutyens, O.M., President of the Royal Academy; Mr. Charles M. Gere, R.A.; Mr. W. Curtis Green, R.A.; Mr. Alan Beeton, A.R.A.; Mr. Frank Dobson, A.R.A.; Mr. Charles Wheeler, R.A.; and Sir William Reid Dick, R.A. Voting on the canvases is actually in progress

# MEMORIES OF FIFTY YEARS—

## An Experiment in Autobiography—VIII

**By J. G.**

A DOUBLE LIFE.—I joined the majority in London which earned its living, and the minority which enjoyed the social sweets of the capital of the world, towards the fag-end of the Edwardian reign and era. It needs no research to pile up an indictment against that era. The mentality of the early 1940's can gather scarlet evidence for the prosecution from every bush. The sober and the impartial will not deny that those nine swiftly-moving years were years of insane myopia, of lost opportunities, of heartless selfishness, of deplorable self-indulgence, of an unforgivable prolongation of the outworn age of Privilege. Class barriers never stood higher and more obstructing. Let us admit these things; but let us admit also that no class in the State was free from blame. An outrageous *hubris* in the vaunted advances of Science, whose potentiality for evil few perceived, guided the opinions and actions of the Privileged and of the under-dog. If a minority enjoyed a "damned good time," the majority was damned-well determined at long last to have one, too, with the least possible delay and sacrifice. The broadening avenues of social life and amenities were to ensure progress, privilege and pickings for all.

Never before was life so full, so coloured, so easy, for the Privileged; never, before or since, so compensated with hopes of a better future for all classes. The rat-tat-tat of Labour, demanding entry, shook the door of Privilege, but the noise was drowned by the strains of the dance orchestra; and the minority enjoyed its last high kick, deaf to portents at home and abroad.

In this world of Edwardian London, I, and hundreds of other young men, stood with a foot in two camps. We gobbled down the sweets which fell from the groaning tables of Privilege; we joined each day the early-morning stream of black-coated workers at an hour when our fellow revellers of the night before still dreamed of their ballroom conquests behind closed blinds in Berkeley Square. It is not to be denied that this was an uneasy type of double-life, and as little conducive to success in the serious, as in the trivial, sphere.

But a right balance must be struck and maintained. I was a free agent. I could have made a choice of camps. Had I then found a career which gave me an interest and prospects of success, I doubt if I would have sacrificed it to any rival loyalty. My friends and relations were to be found in the Privileged camp; my means of livelihood must be sought among the majority. For several years I gobbled the sweets and toyed with the hard bread, without profit, and with many heart tragedies.

What would you? Remember the social fabric of society in 1910 was still the fabric of Trollope's England, and, indeed, of Reform Bill England.

**Johnny Eames.**—A young man, such as I, was still a Johnny Eames in Berkeley Square. The delicious creatures with whom each night I danced and supped, treated me naturally as a brother (too much so, for my taste!). Naturally, they were my sister's friends, my own cousins, my own world. And all went well, and mothers and chaperones smiled on me and perhaps laughed at my witticisms, until a day came—all too often, all too inevitable—when the blind god struck with impish disregard for social conventions and human feelings. Then Mr. Eames was no longer smiled on; poor Mr. Eames had been "rather foolish." The free companions of the 1930's were not yet born. There was no such thing as marriage "on a sports car and the hope of a job," and Christian-names terms were a privilege which had to be worked for—even among not very distant cousins—by years and years of assiduous and correct approach to familiarity.

Indeed, for any of those expensive, fringed darlings, marriage on anything less than £1,000 a year down and good prospects of better things to come, would not have occurred to them, let alone to their parents, as practical sanity. A state of affairs tragic enough for an impressionable Johnny Eames. And, oh, those mornings after! With a heavy head and heavy eyes and leaden heart, coping with dusty files in a stuffy office overlooking a dingy backyard, reckoning gloomily, but accurately, that in ten years' time (middle age!), with luck, one's salary would have crept up towards the £500-a-year mark.

But one more corrective, one more effort to achieve balance! I remember reading Mr. Humbert Wolfe's autobiography and being disagreeably struck by the clear proof that, in his "upward agony" to success in the Civil Service and to a niche in the Valhalla of Poetry, he had continuously suffered from what was nothing more or less than a "social" deficiency complex. There is no escaping that conclusion from Mr. Wolfe's autobiography. He suffered for years from a "*wrong*-old-school-tie" complex. It is abhorrent to me (and always was so) to think that any youth of more than average ability could suffer from such a deficiency complex, embracing his appearance, clothes, means of social status, in any society howsoever distinguished or "fashionable." His brains should have lifted him in spirit, even in his callow youth, above such doubts and to the head of the procession in which he walked.

**The Break-Away.**—I am glad to remember I had no such complex. But that is not to say I had no complex or sense of frustration. The social and economic conditions and standards of that day, and my own circumstances, made that inevitable. I was like a battleship in a squadron of capital ships fully armed, myself lacking the essential big guns. I lived at home, comfortable in the enjoyment of what to-day would be reckoned as monstrous luxuries in the way of food and service; I had enough money to supply all the elaborate requirements in clothing for various occasions; to own a pair of guns, to buy quantities of cartridges, tip keepers and loaders and butlers, and travel in reason whither I would. But not then, nor within two decades, could I hope to earn enough to justify any expectation of being able to marry in the circle to which I belonged. Indeed, my loves (bless their hearts!) might well be grandmothers before I could enter the field. I have set it down in no spirit of martyrdom, and without bitterness. In all good humour and honest realism, that was the position of every Johnny Eames when George V ascended the throne of an England still held in the chains of the social conventions of the Reform Bill era. Small wonder then, that, vulnerable and impressionable as I undoubtedly was, my "double life" was fraught with mental suffering, a suffering only enhanced by my delight in, and zest for, the sweets of Privilege—first-rate grouse- and covert-shooting, endless opportunities for dancing and theatre-going, cricket weeks, hunt balls, and light and colour of every kind in London and in the stately homes of England and Scotland.

The contrasts between work and play were too pronounced, too bitter. The "mornings-after" became unbearable. Following one such passionate tragedy, I cut adrift, once more resigned my dingy office-stool, and incontinently went to Canada, to seek a swifter fortune in the New World. That was in 1913.

**(The next article in this series will be published in the issue of May 2.)**

**THE EPIC FIGHT OF THE "JERVIS BAY" RECORDED BY MONTAGUE DAWSON:** The story of how the armed merchant cruiser *Jervis Bay* fought for two hours with a German raider and so enabled the convoy she was guarding to escape under cover of darkness stands out as one of the heroic deeds of the war. She was out-gunned by the enemy, but fought on until she went down with the flag flying. Mr. Montague Dawson, naval artist of *The Sphere*, has recorded the fight in a painting exhibited at Hampton Court in the Great Hall of the Palace. The *Jervis Bay* was a vessel in the fleet of the Aberdeen and Commonwealth Line

## THE WORLD OF BOOKS. By Vernon Fane

(*Continued from page 90*)

Yet another American foreign correspondent to set down his experiences and draw his conclusions is Mr. Leland Stowe. NO OTHER ROAD TO FREEDOM (Faber. 12s. 6d.) covers his experiences on the war fronts, beginning with the Finnish campaign, witnessing the rape of Norway, and then on to Albania, Yugoslavia and Greece. Mr. Stowe is a veteran correspondent of the Spanish Civil War, to which he continually relates some of the major issues of the present conflict. He is at times critical of the British, but it is fair to say that he does not spare his own country either.

ANZACS INTO BATTLE, by Tahu Hole (Hodder and Stoughton. 12s. 6d.), is a very full and comprehensive survey of nearly five hundred pages, and plentifully illustrated. It is a magnificent tribute to the Australasian troops operating on all fronts; and as such is of particular interest at a moment when Australia stands at bay.

Mr. William Roughead needs no introduction to those who are interested in crime and criminals. REPROBATES REVIEWED (Cassell. 15s.), is another characteristic collection of curious villains. There are ten in all, and every one of them provides a good story, told with all Mr. Roughead's wit, insight and attention to historical detail.

Those who enjoy the literature of mountaineering (and the number is by no means confined to mountaineers) will be well advised not to miss HIGH CONQUEST, by James Ramsey Ullman (Gollancz. 16s.). Well documented with maps and illustrations, this book is, in fact, a history of mountaineering from its earliest beginnings in the Alps 150 years ago down to the last attempt upon Everest just before the war. The pioneer was de Saussure, who made several attempts on Mont Blanc before its summit was finally reached in 1786. Mr. Ullman surveys the whole field of mountaineering in all parts of the world.

In fiction, many devotees will welcome yet another Whiteoaks novel from Miss Mazo de la Roche. In WAKEFIELD'S COURSE (Macmillan. 9s.) we are reintroduced to the ever-flourishing Whiteoaks family in the year 1939. Rennie and his little daughter go over to Ireland to look at a possible winner of the Grand National. Wakefield by this time is a promising young actor, in love with Molly Griffith, but when the war comes we find Wakefield in the R.A.F., Rennie and Piers in France, and Finch at Dunkirk.

THUNDER IN THE EARTH, by Edwin Lanham (Heinemann. 10s. 6d.) is not, as the title might imply, a war novel, but a story of Texas, in the period of the oil boom. Cobb Walters, the hero, after a lucky gambling break, strikes oil, and runs wild in a town notorious for its turbulent and unprincipled recklessness. The villains are the bankers and double-dealers, and there is plenty of violence, as well as a killing in which Walters is involved. This is a long novel, but extremely well done and well written.

The author of *Show Boat* and *Cimarron* is on ground well suited to her talents in SARATOGA TRUNK (Heinemann. 8s. 6d.). New Orleans and Saratoga in the '80's furnish a background as rich and picturesque as any that American history has produced, and Miss Edna Ferber's story of Clint Maroon and his beautiful wife Cleo is exciting, romantic and full of colour.

Miss Joan Grant, whose *Winged Pharaoh*, quickly and deservedly became a best-seller, returns once more to ancient Egypt in EYES OF HORUS (Methuen. 9s. 6d.). The period this time is about 3,500 B.C., and the story is told with all the author's passionate veracity and attention to detail in eye-witness descriptions. In spite of a few frank and unpleasant scenes, the dominate note of this book is sunshine and beauty, and re-creation of a civilisation which produced some art which has never been surpassed in the history of man.

In Mr. Claude Houghton we have an author of a highly individual character. ALL CHANGE HUMANITY (Collins. 9s. 6d.) is of his best vintage. It is impossible to describe this novel in the course of a brief notice, so it must be sufficient to say that the background is the international scene between May 1938 and May 1939, and that its many characters depict certain defined aspects of the modern world. Mr. Houghton's exceptional narrative gifts are used to interweave several subsidiary plots.

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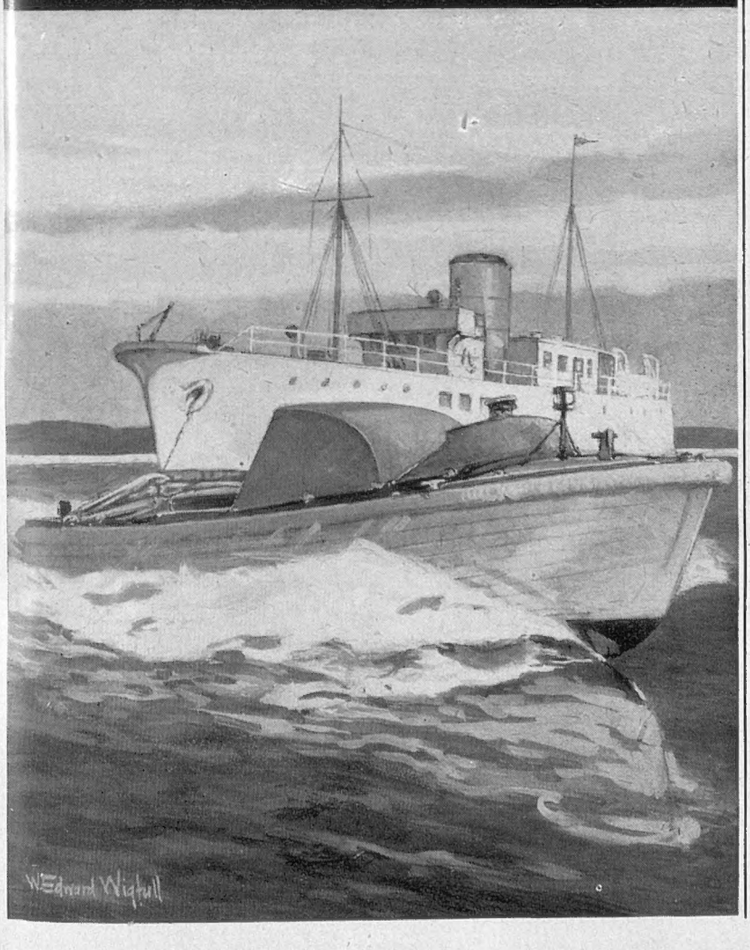




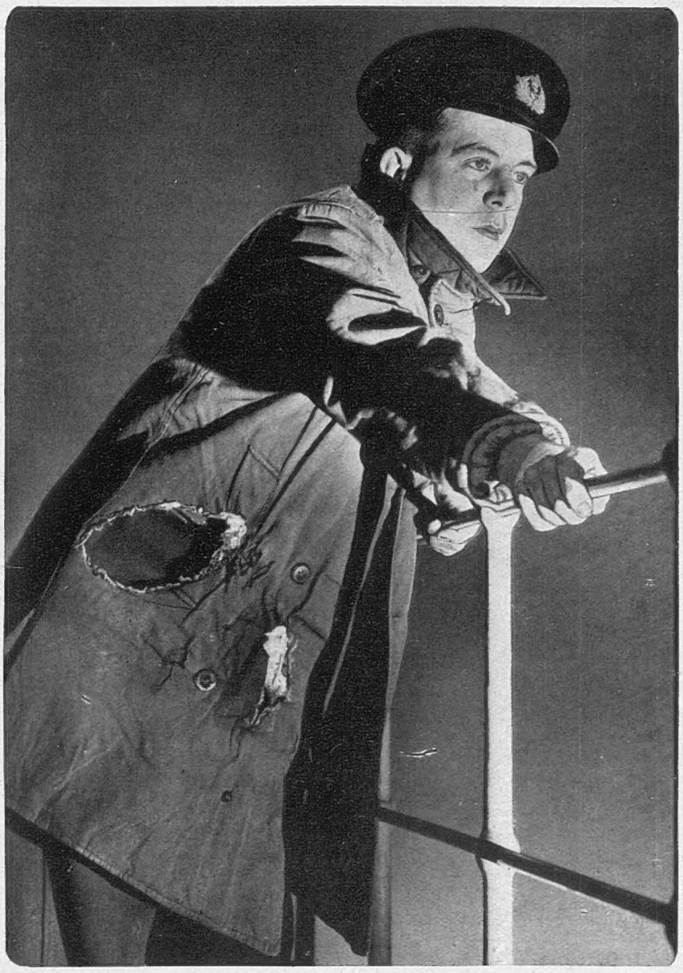

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PRINTED IN ENGLAND by THE ILLUSTRATED LONDON NEWS AND SKETCH, LTD., Milford Lane, London, W.C.2, and Published Weekly by ILLUSTRATED NEWSPAPERS, LTD., Commonwealth House, 1, New Oxford Street, London, W.C.1. SATURDAY, APRIL 18, 1942. Entered as Second-Class Matter at the New York (N.Y.) Post Office, 1903.